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MENTAL HYGIENE VERSUS PSYCHOANALYSIS

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NAPANOCH, N. Y.

In an article published in the Psychoanalytic Quarterly for April, 1932, Dr. Frankwood E. Williams asks the question, "Is there a mental hygiene?" and promptly proceeds to answer this question in the negative. That which today passes as mental hygiene, he tells us, is not really mental hygiene at all but "social psychiatry—the application of psychiatric knowledge, principles and methods to the better understanding and management of social problems."

". . . Neurology, as such has contributed nothing to our knowledge of the neuroses; psychiatry, as such, has contributed nothing to our knowledge of the functional psychoses. Neither has contributed anything to our knowledge of the behavior disorders, of personality or character development or of the motivation of human conduct or, in other words, to mental hygiene or even to the beginning of a mental hygiene . . . "

"No leads come from academic psychology that can arouse expectation for the present of anything more fundamental in the understanding of human behavior."

"Perhaps a mental hygiene is not possible at the present time. If this is the case, then it would be well to admit it, for that in itself would be a beginning."

These are indeed startling words, coming as they do from the former general director of the National Committee for Mental Hygiene and they carry a challenge which we cannot ignore. We must face the facts. After all, have we a mental hygiene today in the true meaning of the term and, if not, why not? There must be grounds of some sort, good or bad, for Dr. Williams' very broad and sweeping assertions. What can they be?

The first thing to bear in mind, when we come to consider Dr. Williams' assertions, is that he is a psychoanalyst and that his conclusions are based on psychoanalytic premises. In order to understand how he has arrived at his conclusions, it is therefore necessary that we should first have a clear understanding of the foundation of psychoanalytic theory upon which they rest. After

all, what is psychoanalysis? It seems to me that failure to understand the essential nature of the psychoanalytic theory and the logical conclusions to which this theory leads is responsible for a very large part of our present-day confusion of thought in regard to the whole problem of psychopathology, psychotherapy and mental hygiene.

Reduced to its simplest terms, psychoanalysis is a method devised by Professor Freud of explaining mental abnormality in terms of motive or desire. According to the thinking of the ordinary man, every action is due to a motive, a desire to do or obtain something, and the business of explaining behavior is a matter of finding the wish which has caused it, or, what comes to the same thing, the goal or purpose toward the attainment of which the behavior is directed. Thus one explains a murder by saying that it was due to a desire for revenge, or that its object was revenge. One explains a man's running away from danger by saying that it was due to a desire to save his skin. Before the days of psychoanalysis, this kind of psychologizing, whatever value it might have as a means of explaining our so-called normal behavior, seemed of little use in explaining those forms of thought, feeling and action which were looked upon as abnormal. How, for example, could one explain the fear of open spaces as the outcome of a wish? Or what desire could possibly lie back of a man's belief that he was being pursued by enemies who were trying to kill him? What Professor Freud has given us in his psychoanalysis is a theory and method of procedure which makes it possible to use this kind of explanation in the field of the abnormal. This he has done by making use of the concept of the "unconscious." According to psychoanalytic theory, psychopathic phenomena are manifestations of impulses or desires, which being kept bottled up in the unconscious, tend to manifest themselves in disguised or distorted form, and the technique of psychoanalysis is a method of procedure by means of which—at least so it is claimed—these unconscious desires may be brought to light.

But what are the unconscious motives to which, according to psychoanalytic theory, our mental abnormalities are to be attributed? Answers to this question will vary according to the particu-

lar school of psychoanalytic thought to which one happens to belong. According to the beliefs of the orthodox and near-orthodox Freudians, they are in the main pervert sexual desires which have been repressed because they are in conflict with the ego-ideal. Of these pervert sexual desires, there are three principal kinds, incestuous desires, homosexual desires and narcissistic desires, and these desires are supposed to date back to very early childhood. They are due to defects of development in "infantile sexuality."

It is with this Freudian theory of mental disease that Dr. Williams approaches the problem of mental hygiene. Now what are the conclusions regarding treatment which logically follow from such a theory? If mental disorder is due to motives or desires which are productive of harm because they are unconscious, then the thing to do in order to cure any case of mental disorder is to get rid of the wish which is responsible for the patient's condition, or at any rate bring this wish into consciousness where it will no longer give rise to the symptoms of nervous or mental disease which result from its repression. And this of course is what the psychoanalyst claims to be able to do by the use of his psychoanalytic technique. Psychoanalysis is a sort of mental surgery by means of which the psychoanalyst releases from the unconscious mind the deeply buried motives to which, according to his theory, our mental disturbances are due, permitting them to find their way into consciousness where they can be productive of no further harm.

But what of mental hygiene? Is there anything we can do to prevent the development of these disorders? Bodily disease, we regard as due in the main to unwholesome living conditions and unwholesome habits of life. Physical hygiene, the preservation of bodily health, we look upon as simply a matter of correcting these unwholesome living conditions and unwholesome habits. We see it as a matter of finding or creating for ourselves a healthy environment and regulating our lives according to the laws of health within that environment. To the man of ordinary common sense it might seem that mental health or well-being was to be preserved in the same way, that it was a matter of finding a wholesome mental environment and regulating one's life within that environment accord-

ing to the laws of mental health. And, as a matter of fact, all our efforts toward the development of a mental hygiene have thus far been directed along these lines. We advise people to avoid conditions of life in which they are subjected to undue mental or nervous strain or which, for any other reason, are likely to prove harmful. We advise them to avoid habits of worry and other unwholesome tendencies and to develop habits of industry, cheerfulness and courage, to face the facts of life honestly and squarely, to cultivate a sense of humor and to get sufficient rest and recreation.

Now, looking at the matter from the standpoint of psychoanalytic theory, what does advice of this sort really amount to? Can we hope to prevent the development of mental disorders in this way? It seems to me that if we accept the basic tenets of psychoanalysis and if we are honest and logical in our thinking, our answer must be, most emphatically, no! Mental ailments, like all other ailments, can be prevented only by avoiding the causes to which they are due, and the causes of our mental ailments, according to psychoanalysis, are not to be found in the stresses and strains of everyday life, nor in the various bad mental habits or acts of omission or commission on which, in our present day so-called mental hygiene, we are accustomed to dwell. Such things may perhaps serve to aggravate a mental ailment which is already present or cause a latent mental disease to become active, but the real cause of the psychopathic condition in every case lies much deeper, the real cause is to be found in unconscious pervert sexual desires, and the only way to prevent the development of mental abnormalities is to prevent the development of these sexual desires to which they are due.

Mental hygiene as we understand it, that is to say the science and art of right living, can for the true psychoanalyst have very little significance because, according to his theory, mental disorder is not due to unwholesome living conditions or unwholesome habits of thought and action which it is possible for us to correct, but to the presence of unconscious sexual desires which date back to early infancy. The only way to prevent the development of mental abnormalities, from his point of view, would therefore be to go back to early infancy and prevent the development of these pervert mo-

tives or desires. But how is this to be done? That is a question to which the psychoanalyst has no answer. More than that, it is a question regarding which he does not appear to have been very much concerned. He has apparently been too busily engaged in the more lucrative therapeutic art of digging up these unconscious motives to concern himself greatly about the question of how their development is to be prevented.* The nearest he comes to mental hygiene is when he urges people to come to him early and have their unconscious minds evacuated before their repressed desires have a chance to poison their systems and cause serious harm.

So we see that, if we look at the matter from the psychoanalytic standpoint, we must come to the conclusion that there is no such thing as a mental hygiene at present, and, what is more, that no mental hygiene will be possible until the psychoanalyst is able to tell us how in the developing infantile sexuality unconscious pervert sexual desires are produced and how their development is to be prevented. And this, it would seem, is exactly the opinion which Dr. Williams holds in regard to the matter and which he has set forth in his recent article. Advice as to wholesome living conditions and principles of self-management, which is today being offered under the name of mental hygiene, he thrusts contemptuously aside as of utterly no consequence.

"If," he says, "all we have to offer is an ameliorative program in social psychiatry or such advice as 'avoid syphilis and you will avoid syphilitic psychoses' or 'avoid alcohol and you will avoid alcoholic psychoses,' or, 'don't worry,' 'keep smiling,' 'know thyself,' 'face the facts,' or 'face reality' or common principles of physical hygiene, such as adequate sleep, recreation and guarding oneself against too great physical and nervous strain and the like, then we must cease calling ourselves mental hygienists, face the facts ourselves that we have no mental hygiene and, if we have the courage and can free ourselves from our presumptions, attempt in a humble spirit to discover what we have only been talking about."

"The basic question with which psychiatrists and particularly those interested in mental hygiene start is—what are the causes of mental and nervous disease? . . . . From the point of view of men-

*NOTE—In a footnote to Dr. Williams' article, we are told by the editors of The Psychoanalytic Quarterly that "a serious study of mental hygiene in the light of psychoanalysis" is "yet to be made."

tal hygiene perhaps we may get further by beginning with what would seem to be a more fundamental question—What are the motivations of human conduct?"

"We must," he tells us "begin at some strategic point; that point obviously is infancy. Although aware of the unity of the infant, mental hygiene will focus its attention upon the developing psyche, attentive to but leaving to others, other types of investigation. Because it is at hand and has proven productive and useful, infantile sexuality is the natural point of departure, and for this study psychoanalysis is the natural working hypothesis of choice."

Obviously the only complaint that one can make against Dr. Williams is that he is a consistent psychoanalyst. Good mental habits, wholesome living conditions, all those things which go to make up what we are accustomed to think of as a well-ordered life can be of no real consequence to the psychoanalyst who follows his theories through to their logical conclusion. For the causes of mental disorder, according to the depth psychology of Freud, are not to be found in the circumstances and actions of our everyday lives but in motives that are hidden away in the dark unfathomed caves of the unconscious. All that Dr. Williams has done has been to let the cat out of the bag. Being a whole-hearted believer in the doctrines of psychoanalysis, he has been indiscreet enough to point out to us the conclusions to which a logical following out of these doctrines must inevitably lead.

Facing honestly and squarely the fact that we cannot consistently accept the doctrines of psychoanalysis and at the same time believe in right living or what we are accustomed to look upon as mental hygiene as a way to mental health, what are we to do? Shall we follow Dr. William's example and throw our mental hygiene aside as of little or no value? Before taking such a step, it seems to me that we should consider the possibility that the psychoanalyst may be wrong in his theories and that the mental and nervous disorders which he attributes to unconscious motives or desires may really be due to causes of a different sort. Perhaps if we look into the matter carefully enough, we shall find that what we ought to throw overboard is not mental hygiene but psychoanalysis.

Freud, it is true, has shown us how we may explain the phenom-

ena of abnormal behavior by attributing them to motives or desires, but this is not the only possible way of explaining them. Behavior, we may think of, as produced by the action of a highly complicated piece of mechanism composed of sense organs, nervous system muscles and glands, and our abnormal thoughts, feelings and actions we may attribute to the limitations and defects of this piece of mechanism by reason of which it sometimes fails to respond in an adequate way to the demands made upon it. With this conception of mental disorder, the problem of explaining the abnormal is of course quite different. It is not a matter of unearthing motives or wishes, but of determining the nature of the machinery of behavior and the way in which it works so that we may be able to form some conception of the processes taking place in it in giving rise to the psychopathic phenomena with which we have to deal. This kind of psychopathology which would explain abnormal behavior as due to faulty action of the machinery, we may call mechanistic psychopathology; while the psychopathology of the psychoanalyst in which it is explained by finding a wish or motive, we may call motivistic.

It is today generally admitted, even by those who call themselves the friends of psychoanalysis, that it is in many ways at least a flimsy structure; that its technique is unreliable, enabling the psychoanalyst to discover in his patient practically anything that he may wish to find; that very much of its theory is absurdly fantastic and conflicts with ordinary common-sense; that as a therapeutic procedure it is far from satisfactory and in many cases does more harm than good. Psychoanalysis continues to be tolerated however, largely because along with its error there is undoubtedly a certain amount of valuable truth. It is generally assumed that its defects are superficial and will be corrected in time; that, in other words, with proper pruning psychoanalysis will prove to be the root from which a real science of psychopathology will eventually develop. With this optimistic opinion I am quite unable to agree. The trouble with psychoanalysis, as I see it, is not a matter of superficial defects in the superstructure. It is a matter of the essential unsoundness of the foundation upon which the whole psychoanalytic edifice has been erected.

Psychoanalysis is a motivistic psychology. It is built upon the assumption that all mental abnormality is to be explained in terms of motive or desire and the only way in which the psychoanalyst has been able to explain mental abnormality in terms of motive or desire has been by his ingenious but unwarrantable use of the concept of an "unconscious." Stephen Leacock, in one of his stories, tells of a man who was able to explain all the tricks performed by a conjuror, to his own satisfaction, in one and the same way. However strange and baffling a trick might be, whether it involved the appearance, disappearance or change of any article large or small, this man always explained it by saying that the conjuror had the article up his sleeve. The unconscious mind, for the psychoanalyst, would seem to serve the same function as the conjuror's sleeve served for the man in the story. Whenever a patient displays an abnormality of behavior for which no motive is apparent, the psychoanalyst can always explain it by saying that the motive or desire is in the unconscious, and, as no one can open up the unconscious to show that the alleged desire is not there, it is easy for anyone to offer an explanation of this sort to accouunt for the occurrence of any phenomenon which he does not understand, and, in the language of the street, "get away with it." Freud has given us a method which makes it easy to explain the phenomena of mental disorder, but it is a method which takes psychopathology out of the realm of ordinary workaday science and into that of speculative philosophy where, released from the limitations of objective reality, the psychopathologist can give full play to his imagination and follow free and untrammelled where fancy leads the way.

Whether he realizes it or not, the basic concepts of the psychoanalyst are essentially animistic. In earlier times, man believed himself to be formed by the bringing together of two entirely separate and dissimilar entities, a body made from the dust of the fields and a spirit or psyche which was the tenant of this body and moved it in accordance with its (the spirit's) desires. Psychology, according to this doctrine, was the science of the soul and was something entirely separate and distinct from the sciences of anatomy and physiology which had to do with the material body in which the spirit was encased. A difficulty which this animistic the-

ory presented however was the necessity of explaining the phenomenon of conflict. Man observed that he frequently experienced impulses or desires to follow diametrically opposite courses of action at one and the same time. As St. Paul has it, "When I would do good, evil is present with me." This phenomenon of conflict, man sought to explain by postulating the existence within himself, not of one only, but of several psychic entities, one pulling him in this direction, another pulling him in that. This kind of psychology which pictures the mind as a sort of dwelling place of personified forces which struggle together for the mastery is still the psychology of the great bulk of mankind. It is also the psychology of the psychoanalyst, only the psychoanalytic hierarchy is somewhat different from that of the ordinary man. Instead of talking about the "voice of conscience" and the "carnal" and "spiritual" forces of his nature, the psychoanalyst talks about "instinctual drives," the "libido," the "ego," the "super-ego" and the "id," and he explains the symptoms of nervous and mental disease as expressions of the demands of these various separate and warring forces within him.

The psychopathology of the future, I believe, will not be this sort of a psychopathology at all. It will be mechanistic, not motivistic. It will be physiological in its fundamental concepts, not animistic. In a paper read before the last annual meeting of the American Psychiatric Association, I attempted to indicate roughly the lines along which it seems to me we must proceed in developing a mechanistic psychopathology and to present in brief outline a tentative theory of abnormal behavior built along these lines. It might be worth while here to point out very briefly the nature of the conclusions in regard to etiology and treatment to which such a theory leads.

Looking at the matter from the physiological or mechanistic point of view, behavior is seen as a never-ending series of reactions on the part of the organism to the situations of life. And these reactions occur as a result of the stimuli which the situations afford. Apply one stimulus and you get one form of behavior; apply a different stimulus and you get behavior of a different form. This is just as true of those forms of behavior which do not meet the needs

of the situations in which they occur and which we call psychopathic as it is of those actions which we call normal. So we may conclude that the cause of every abnormal action is a situation or stimulus of some sort, for, if the organism had not been subjected to this particular stimulus, it would not have reacted in this particular way.

But, although whenever we get an unsatisfactory form of behavior there is a stimulus which has called it forth, we find that the same stimulus which calls forth an unsatisfactory reaction from one individual, from another calls forth a satisfactory one. How is this to be explained? It is due to differences in the nature of the organism which reacts. When, therefore, we get an unsatisfactory or abnormal reaction, we may attribute it to either one or both of two things, (1) the stimulus which calls forth the reaction, or (2) the nature of the organism, the existence of some limitation or defect by reason of which it responds to this particular stimulus in this particular way.

If we attribute the unsatisfactory reaction to a defect in the organism, the next thing to consider is the question of the causes to which such defect may be due. Now there are three factors which play a part in determining the nature of the organism. The first is heredity. The second is education, by which is here meant the sum total of the impressions stamped upon the brain as a result of the experience to which, in the course of his life-time, the individual has been subjected. The third is injury or disease, the changes produced in the organism as a result of old age, wear and tear or chemical changes of one kind or another. The human brain, we may think of as more or less like a metal plate with a pattern or design of some sort engraved upon it. In this pattern there are a few comparatively simple lines that may be attributed to the hand of heredity; to these have been added other lines cut by the chisel of experience; and added to these lines there are dents and scratches and eroded areas which are the result of injury or disease.

Altogether, therefore, there are four factors which enter into the production of abnormal behavior. On the one hand, there are the different trying or difficult situations to which the organism reacts

in an unsatisfactory way. On the other, there are the three factors which are responsible for the limitations and defects of the mental machinery; namely, heredity, education and somatic injury or disease. A great many people, including the psychoanalysts, are accustomed to talk about the "psychic" and the "somatic" factors in mental disease as if they were separate and different things. When we look at the problem of etiology from our mechanistic viewpoint, we see that this distinction entirely disappears. The so-called psychic factors in mental disease are simply the stimuli which act through our sense organs on the nervous system to give rise to behavior and the changes in structure, the memory impressions and habit paths laid down in the brain tissue as a result of these stimuli; while the so-called somatic factors are the changes in structure produced as a result of injury or disease.

Now, since mental ills are due to bad heredity, faulty education, somatic disease and difficult or trying situations, the preservation of mental health is a matter of dealing with these four factors. It is a matter (1) of breeding a race of potentially healthy and efficient people, (2) of giving these people the kind of education or training which will make the most of their potentialities, (3) of preserving their bodily health, and (4) of giving them the kind of environment which is best suited to their requirements. That, of course, is looking at the matter from a broad sociological point of view. Looking at it subjectively, that is to say from the standpoint of the individual whose concern is the preservation of his own health, the factor of heredity may be ignored as one over which he has no control. We cannot change our own parentage. The question of our inborn capacities and defects was settled for us before we came upon the scene. Individually we can do a great deal for ourselves however in the way of self-education, the development of good habits and the correction of bad ones; we can do much for the preservation and improvement of our bodily health; and we can seek out or build up for ourselves that particular kind of environment in which we can function to the best advantage. We can, in short, do much for the preservation of our mental health by making our environment a healthy one and by living according to the laws of health within that environment.

So we see that the mechanistic theory of mental disorder leads to a belief in mental hygiene, that is to say, it leads to the conclusion that mental health is to be attained by right living. In this it differs tfrom the motivistic theory of the psychoanalyst which leads to the conclusion that wholesome living conditions and wholesome habits of life are of relatively little importance, and that mental health is only to be achieved by muck-raking for pervert sexual desires in the cesspool of the unconscious.

CLASSIFICATION OF PRISONERS*

BY JAMES L. McCARTNEY, M. D.,
DIRECTOR, CLASSIFICATION CLINIC, ELMIRA REFORMATORY

Psychiatric work in prisons has been a relatively recent development, although it is gathering momentum, and I am glad to say that the psychiatrists are being given a hearing in many of the correctional institutions of the United States. Massachusetts led in this forward movement with New Jersey and New York now coming well up into the foreground. But none of our institutions has yet reached the high psychiatric standard set by the Prussian ministry of justice. Any person interested in this field of work could well read the recent book by Dr. William A. White entitled "Crime and Criminals." Dr. Frank L. Christian, superintendent of the Elmira Reformatory, who has watched the progress of this movement possibly closer than any other prison executive, has done us a great compliment when he has publicly stated that he feels the psychiatric work in his institution has greatly assisted in settling his administrative problems. The American Prison Association, The American Psychiatric Association and The American Orthopsychiatric Association have been studying the problem of psychiatric service to the prisons, and The American Prison Association has been attempting to convince the various wardens of the value of the psychiatrist in these institutions.

Unfortunately, most prison workers have the attitude that prisoners must be punished and that prisoners are all dangerous individuals. They lose sight of the fact that all individuals are potential criminals and that with our multiplicity of laws today it is almost impossible for an individual to go through life without breaking one or more of these laws, and that prisons have grossly failed in preventing the spread of crime. Just as our mental hospitals up until the last 25 years were practically custodial institutions, so our prisons are still planned to wreak the vengeance of society upon the unfortunate individuals who are so unlucky as to be caught in the infringement of society's rules.

Modern psychiatry in the correctional field has glimpsed the possibilities of psychotherapy and true reform. As the result of studies

*Read before the Binghamton Psychiatric Association, Binghamton State Hospital, April 24, 1933.

in child guidance it is realized that very little is gained by the philosophy of punishment and that wholesome personalities can only be created by reason. Approaching this problem from the psychiatric viewpoint, we find some hope for the future, but there is ample opportunity to become discouraged, as is the case with all pioneer work.

The careful study of each individual in our prisons has revealed some very important facts and has impressed us with the necessity of changing the attitude of society towards this whole problem. This may eventually lead to the reconstruction of our prisons and the conducting of them as hospitals for mental cases rather than institutions for punishment.

Psychiatric diagnosis in prisons is still a new subject, and is, therefore, open to dispute. Since psychiatrists, as we well know, do not always agree in the diagnosis of frankly psychotic individuals we can hardly expect that the relatively small number of psychiatrists working in our prisons should always agree in the psychiatric classification of prison inmates. One has but to attend the staff conference at a State hospital to witness the "battle of minds" over the classification and prognostication of their mental patients. The complexity of this problem can, therefore, be understood when it is realized that frankly psychotic individuals rarely get into prison in this State except as they may be sent directly to Matteawan or Dannemora, while the bulk of our prisoners are borderline types and, therefore, diagnostic hazards. Even prison psychoses that develop in our institutions are seldom clear-cut cases.

Last year we had admitted to the Elmira Reformatory 1,046 new prisoners of which 32.8 per cent were diagnosed in our classification clinic as psychiatrically normal. Two hundred fifty-three, or 24.2 per cent, diagnosed as feebleminded, having an I. Q. of 70 or less, and, therefore considered unfit subjects for our institution. These feebleminded individuals should have been sent directly by the court to the Institution for Defective Male Delinquents at Napanoch. A word might be added here that the 70 I. Q. is based on an average mental age of 15, which is the standard norm accepted by the New York State Department of Correction. About 7.5 per cent of our new admissions were considered psychotic or potentially psy-

chotic while the balance of the group were placed in the rather ambiguous group called neuropathic, which needed special psychiatric study.

Since 1876, when Lombroso suggested a workable classification of criminal types there have been a good many classifications suggested, but the work in this country was not brought to a head until 1917 when Bernard Glueck suggested his psychiatric classification. As early as 1908, Healy suggested that "no classification along systematic lines is adequate," and he further stated that "any classification of offenders or offenses if it is to be of practical service in treatment must surely take into account at least the immediate causes." He went on to emphasize that it is necessary to make a careful case study of every prisoner. The group in New Jersey has made a number of very good suggestions for psychiatric classification, but the work in New York State has received its greatest momentum from the report of Dr. V. C. Branham, deputy commissioner of correction, published in 1931, which follows fairly closely the classification as drawn up by the American Prison Association in its final report of 1928.

The first classification clinic in New York State was established at Sing Sing Prison in 1927 under the direction of Dr. Amos T. Baker, although a psychiatric clinic was established at that institution in 1917 under Dr. Glueck. In the summer of 1931 another clinic was set up for the new Attica prison under the direction of Dr. Walter B. Martin and at the same time the psychiatric work at Elmira Reformatory which had been functioning since July, 1916, was reorganized. The classification clinic at the Elmira Reformatory was not established officially until the latter part of October, 1931. Since that time it has been growing rapidly and has met with gratifying success. I wish to add that there is no doubt in my mind that one of the main reasons for our success has been the whole-hearted support we have received from Dr. Frank L. Christian, superintendent, and the Albany office of the State Department of Correction.

The first of October, 1932, we took over the old institutional hospital building as a receiving unit. This is a four-story structure with ample offices on the first floor and a lecture room. The top

three floors are three dormitories, where the new men spend ten days in each dormitory. The prisoner on being received at the reformatory is retained in an individual cell for the first night until he is given a brief physical examination to determine the presence of any infectious disease. Blood for a Wassermann test and a throat culture is taken from every man, and sent to Albany. He is then assigned to a bed in the first dormitory and remains in the receiving building for the next 30 days. Within 24 hours the man is interviewed as to his family, his school, vocation, and delinquent history. His medical history in other institutions that he has been in is also registered at this time. Immediately, questionnaires are sent out to the various individuals and institutions that he has listed in order to obtain further informaiton and to verify the inmate's statements. Following this preliminary examination the man adheres closely to a four-week schedule of tests, interviews and lectures. Monday morning of the first week the man is given a thorough physical examination including a complete neurological, and his eyes, nose, throat and teeth examined by specialists. The rest of the first week the man is given a literacy test, one of the standard group intelligence tests, and a Stanford achievement test. These tests are varied from week to week, so that the men do not become "steerwise." The inmate is given a preliminary psychiatric examination, and is interviewed by the superintendent, and assistant superintendent.

The second week the inmate is taken on a tour of the various shops throughout the institution so that in selecting the trade he wishes to learn while in the institution he will be aware of the facilities available. During the second week he is given individual psychological tests; a battery of performance tests, and where his I. Q. is under 80 by the group test he is given a Stanford Binet and any other tests that may be thought advisable in order to determine whether or not he is feebleminded. By the third week the replies to the various questionnaires sent out are usually returned. Also by this time the probation reports are in hand, and the cases that have been cleared through the social service exchanges have returned their reports. Therefore, during the third week the social history is put into shape and the record is ready for the psychiatrist

to make his examination. This examination is completed during the fourth week and is written up by Friday of the fourth week. Should the review of the case justify further physical examination or a basal metabolism test an attempt is made to complete this during the fourth week so that all facts will be on hand for the classification conference held on Friday.

During these four weeks the men are given daily lectures by the various officers of the institution to acquaint them with the rules, the method of securing articles from home, writing letters, institutional discipline, military courtesy, and the process of parole and transfer. The men are given a rule book and they are required to complete the reading of this book during their stay in the receiving building. All discipline cases while in the receiving building are considered separate from the other institutional cases. During the time in the receiving building the inmate is also given his instruction in squad work so that he may take his place in the regiment when he leaves the building. While in the receiving building the inmate has no contact with the general population, eats in a separate part of the dining room, and sits apart in all entertainments.

Since the institution of the classification clinic at the Elmira Reformatory, a conference has been held each week of the year with only one exception. On two occasions a conference was held twice in a week. From the beginning of the clinic in October, 1931, to April 21, 1932, there have been 1,872 prisoners classified, a rate of over 1,000 per annum.

The clinic conference is composed of the assistant superintendent, who has charge of the assignment of the prisoner to his work in the reformatory; the disciplinarian, the director of schools, the school psychologist, the director of the trades school, the officer-in-charge of the training class or psychopathic clinic, the officer-in-charge of the receiving building, the sociologist, the social work interne, the Catholic, Protestant, and Jewish chaplains, the two psychological internes, the physician, the assistant psychiatrist, and the director of the clinic.

Almost every week one or more professional visitors sit in on the conference which is held from 9 a. m. until 5 p. m. with two hours off at noon. The average number of inmates considered in one day

has been 21. The facilities of our receiving building are planned to take care of 150 men every 30 days. The prisoner's name and the charge on which he was committed is first read before the conference and his photograph is passed around the group with a graphic chart showing any infractions of the rules or abnormal behavior during the 30 days he has been in the receiving building. The physician then reports all the physical findings. This is followed by a report from the school psychologist on the man's Stanford achievement and his recommended placement in the institutional school. The vocational director then gives his opinion of the man and his recommendations for placement. The respective chaplain then gives an opinion of the man's religious background. This is followed by a full report by one of the psychologists. The psychiatrist who has made the final examination then reads the social history and gives a summary of his psychiatric findings with the suggested diagnosis and prognosis of the case. The inmate is then called into the room, is interrogated by the other psychiatrist and by any other member of the conference. The inmate then is given a chance to ask any questions he may desire, following which he is dismissed from the room and the director of the clinic announces what he believes should be the psychiatric classification, and the administrative classification which is a prognostication. The assistant superintendent then announces where he believes the man should be assigned. If members of the group disagree with statements made they are given ample opportunity to voice their disagreement and the facts are fully discussed. If thought advisable, a definite statement is placed in the inmate's record which stands as a recommendation to the Parole Board. It has been found that it takes about 15 minutes to go through the above routine, although in special cases the discussion on an individual case has sometimes extended for almost an hour. Necessarily, extended discussion usually has to be cut short, as it would otherwise be impossible to complete the quota for the day.

When the classification conferences were first held the lay members of the group, of course, were anxious for enlightenment on various psychiatric conclusions, and more time was taken for educational purposes. At present the routine moves fairly smoothly

except for an occasional dissension from the psychiatric classification. Each man is rapidly but thoroughly considered, and I am pleased to state that the spirit of cooperation has greatly encouraged us.

If at the time of the classification conference a prisoner is found to be incorrigible, psychotic, or potentially psychotic, or in need of further observation, and not likely to get along in the general population, he is sent the next day to the psychopathic clinic, which is a unit of 50 cells under the direction of a well-qualified senior guard. The inmate can here be observed daily by one of the psychiatrists and given the necessary training or therapy to fit him for his place in the general institutional population, or where he may be held until the necessary steps can be completed for his transfer to the proper institution.

The majority of the inmates the day following the classification conference are transferred to the general population. Each man is assigned to a cell and he begins the institutional routine, attends school, military drill, and spends at least a half-day in his trade assignment. The morning that he leaves the clinic he is given a final talk which brings out the necessity for him to abide by the rules of the institution and also assures him of the interest of the psychiatrist in his welfare. He is told that he may at any time speak to the superintendent or to one of the psychiatrists if he desires personal help. We have found that from 10 to 30 inmates in the general population ask for such personal interviews every week.

Time will tell whether the routine above outlined will have a permanent effect on the institution and on the individual prisoners. There is some criticism made against the method by officers of the old school. But comments generally have been favorable, and there is no doubt that the general attitude of the inmates has been improved. It has been interesting to receive the favorable comments of prisoners that have previously been in the reformatory and have returned for violation of parole. There is a lot yet to be desired, but one encouraging thing that has come as a direct or indirect result of the classification work at the reformatory and which no doubt is very closely tied up with the classification work is the reorganized school system which was instituted this last winter. The

school system now attempts to fit the school to the inmate rather than the inmate to the school, and the plan of education is what is called the project method in which the man is assigned to a vocation of his choosing, and the educational work in the school is directly connected with the vocation. It can plainly be seen that this educational method serves a form of psychotherapy.

One hesitates to venture too many suggestions in the correction field, especially since the public is not educated up to a scientific understanding of the problem of crime and where the institutional routine is pretty well stabilized on a level of minimum effort. This was a criticism that could formerly be made of our mental hospitals and which unfortunately can still be made of many of them.

One conclusion that I have become firmly convinced of in the two years I have studied this subject at the Elmira Reformatory is that with the classification routine as outlined above, thoroughly carried out, we could reduce our prison cells to a minimum. I believe that it would be a fair estimate that less than a third of our present inmates, amounting to slightly over 1,400 men between the ages of 16 and 25, need to be locked in individual cells. The other two-thirds could with benefit to the prisoners themselves and at a great saving to the State be housed in dormitories, but I have no doubt that these statements of mine will be considered fantistical. One of the greatest handicaps that stands in the way of progress in the psychiatric handling of prisoners in this State is the regulations of the law which make it impossible to parole an inmate when he is ready to be paroled, and which also prevents the institution from holding prisoners for an extended length of time even though they are recidivists and potentially dangerous to the community. A definite period of incarceration for a year, as the minimum time that a prisoner can be released from the reformatory undoubtedly militates against emotional stability in many cases. The system of limited and then complete parole to the community, as is now practiced in our mental hospitals, could well be instituted in our prisons. The prisoner when thought ready for parole could be given a chance to demonstrate his ability to live a social existence, and after such demonstration could then be paroled and then discharged. He would not have the constant dread of punishment

hanging over him, but the constant assurance that the State is interested in him and is doing everything possible to help him be a law-abiding citizen.

In conclusion, the longer I work with prisoners the more I am convinced they should be dealt with as mentally sick individuals who because of some physical, social, intellectual or mental handicap have been adjudged anti-social.

An indefinite stay in a correctional institution, not a penal institution, should be prescribed, and the stay in the institution should depend entirely upon the inmate's ability to get along in the outside world.

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THE PLACE OF OCCUPATIONAL THERAPY IN THE MANAGEMENT OF THE FUNCTIONAL PSYCHOSES*

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Any attempt at an evaluation of the effects of occupational therapy upon the functional psychoses must first involve consideration of the development and structure of these disorders, of the plans which through various therapeutic agencies exist for their management and of the means whereby these agencies operating within the psychiatric hospital can be most effectively coordinated. It is now generally recognized that mental illness arises from untoward events in the life history of the patient which, by exerting disorganizing influences upon the levels of integration making up the total personality lead to the alterations of behavior, thought and feeling, which characterize the psychosis. Those concerned with the treatment of such disorders will, therefore, aim, so far as possible, at modification of these causative events, but more particularly of the patient's attitude toward them, so that reintegration in terms of reorganization of daily life can be brought about. In our psychiatric hospitals groups of workers—psychiatrists, occupational therapists, nurses, social workers and others—are collaborating in their endeavors to solve these problems of living and it is sometimes helpful to revaluate the detailed workings of these therapeutic forces. Let us give consideration here to the functions and inter-relationships of the psychiatrist and occupational therapist in the scheme.

The psychiatrist, through an investigation into the personality development of the individual, tries to broaden the patient's understanding of himself, in the hope that he will, as a result, become desensitized to the painful qualities in the experiences which contributed to his psychosis. In addition, by collaboration with the occupational therapist, an effort is made to find some level at which the patient's energies, poorly organized though they sometimes are, can be directed into channels of real activity. By this means, dormant interests can be awakened and phantasy replaced by satisfy-

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ing work and recreation, so that as these are pursued, always to the patient's maximum, new realizations of capacities will appear, insight be amplified, and the desire for exploration into further fields aroused. The therapist who frequently holds a special place in the patient's mind, free of unfortunate implications of authority which he associates with the doctor and the nurse, aims to understand the motives underlying the behavior of the individual under treatment, fosters the "close to normal" atmosphere which brings such comfort to the insecure patient, and gradually by these means cultivates the therapeutic attitude. As treatment continues, it is planned gradually to fill the patient's day with helpful activity, so that a normal rhythm of work, rest and play will be re-established and in consequence the love or social impulse be restored.

Let us consider how the application of these principles has at Sheppard and Enoch Pratt Hospital, aided patients under treatment.

Case I: A single man of 26 came into the hospital with a history of a change of personality having occurred to him at the age of 15, characterized by the development of irritability, a tendency to brooding, despondency and complaints of being a "failure in life." Two months before admission he had become restless, somewhat suspicious, had spoken of injuring his mother and had at times refused food. He was an only child, brought up by his grandmother. Of a shy, sensitive personality, he had mingled poorly with other children, showing little interest in their play life, but developing marked individual mechanical interests. He had always been shy with girls. At the age of 15, after an average scholastic record, he had refused to continue school, and had since remained at home, making no effort to secure work. In the hospital, the patient was seclusive and somewhat depressed; he complained that he was a parasite and that half his life was gone, that he had done nothing. He said that he would like to get rid of the feelings of difference which he had in his association with others so that he could mix with his companions in a normal way. He would not discuss the evidences of queer behavior which had led to his admission to the hospital. The physicians decided not to treat this patient by intensive psychotherapeutic methods, but a program of

socializing occupation and recreation was prescribed. Somewhat contrary to the original expectations, the patient rapidly adjusted himself to these activities, became more cheerful, gained confidence and after a few weeks in the hospital, showed no further abnormalities of behavior. He displayed particular interest in metal work, and expressed great pleasure when some of his work was placed on exhibition. His initial hesitancy overcome, he gradually increased his participation in social activities, and after seven months in the hospital, arrangements were made for him to secure work of a mechanical nature after his discharge from the hospital. In accordance with his own request he was encouraged to return regularly to the occupational department to obtain further instruction in metal work, which had become his avocational interest. Later, on the suggestion of one of the hospital physicians, the patient studied the technical operation of X-ray, and has since been successfully employed as a hospital technician and although still somewhat retiring, is continuing to make a greatly improved social adjustment.

CASE II: A married man of 30 came to the hospital on account of the fact that he had seven days previously developed symptoms of restlessness and apprehension, and had complained that his employer, a man with whom he had had prolonged difficulties, was connected with the murder of the Lindbergh baby and might have designs upon his, the patient's, children. Prior to admission, the patient had taken active measures to protect his family from this danger. Of an ambitious, energetic type, the patient had, since his father's death, which occurred when the patient was six years old, been urged toward emulation of his father's ideals. He had always worked with extreme energy, conscientiously endeavoring to take the place of the standby of the family, and to justify his mother's high expectations of him. Intending to become a minister, he had secured a college education by his own efforts, but the development of a severe emotional disturbance had interrupted his studies at the theological seminary, and had led to the abandonment of this plan. The patient's marriage, five years before his present illness, had been associated with some dissatisfaction, which seemed to have been due to the fact that neither the patient nor his wife had

ever managed the domestic situation, but in the patient's words, had "tried to make each other over." In the hospital the patient was tense, labile in his mood, talked of his beliefs in the machinations which were endangering his family and expressed a wish to have these investigated. He was in good physical condition. A therapeutic plan, which comprised first an effort to relieve the patient of the stress attendant upon the situation precipitating his illness, and second, to provide him with a daily plan of occupation and recreation, was undertaken. Plans for adjustment of the external situation were deferred while the patient's reaction to intramural therapy was observed.

Rapport was soon established, and the patient began to talk freely of his longings to attain the status of an ideal man. It was brought out that this desire, born of his mother's aspirations of him, and his wish to live up to the ideal of his father, had led him into the ministry, but after two years' study and religious speculation, he had developed much guilt around an association with an older woman, had felt that he was bad, that sex was the basis of his difficulties, and following these ruminations had passed into a state of ecstasy, in which he felt that he might be Christ.

Rapid recovery from this illness had followed return to his mother's home, and two years later he had married. He spoke, however, of feeling less sure of his wife than of his mother, on whom he still felt some dependence. With characteristic ambivalence, he also recalled that at times in childhood he had doubted his mother's love and understanding of him.

One finds that at this stage of the patient's treatment, four weeks after admission, the patient was actively engaged in occupational therapy and the report from the shop read as follows: "On his first visit to the shop, the patient was quite elated and had no idea what he would like to do. It was suggested that he make a cord seat for a chair. Considering the fact that he had never before attempted anything of this kind, his work was above the average, and he was eager to continue it. He kept up a continual flow of conversation on many topics but was able to pursue the work satisfactorily.

"In his contact with the patient group he was jovial and good-

natured, and showed no particular preferences. Later, he began to display an interest in the women therapists."

The patient, in his interviews with the physician, discussed further his relationship to his employer which had for so long been a source of uneasiness in him, and had aroused feelings similar to those which had preceded his previous mental illness. When he thought of this man, he felt mad and wanted to tussle with the hospital attendants; this was associated in his memory with recollections of an older brother having made him wrestle with other boys in order to make a man of him." He described day dreams of being an athlete, and these were to him, mixed with a desire for emotional stability, or a balanced sex life. At this time he evinced much satisfaction from the competitive games that were prescribed and the recreational report stated that he was active and energetic, enjoying indoor and outdoor activities. At the same time he was maintaining some association with women patients in the hospital dances and literary meetings. The director of these activities reports: "His adaptation to the patient group is still good. He is beginning to show more interest in the younger people, and there has been a short period of facetiousness with one of the women therapists. He has compared the energy of one of these to that of his mother."

The physician was able to utilize certain situations described in the therapist's report to amplify the patient's studies of his personality problems.

Rapid improvement has since occurred in the patient's condition, and now, seven weeks after admission to the hospital, although still somewhat insecure, he characterizes his former suspicions as exaggerated ideas due to emotional stress. Expansion of his recreational activities beyond the hospital has tended to relieve some discontent with the restrictions imposed on him, and feeling that his improvement has been due to the combined psychotherapeutic and occupational efforts, he is willingly continuing the study of his personality difficulties.

CASE III: The next case, which illustrates so well the combined results of close coordination of the efforts of psychiatrists, occupa-

tional therapists and social worker, was treated by Dr. Eleanora B. Saunders, to whom I am indebted for its use in this paper.

A boy of 17, quiet and retiring in personality, had for a year and a half shown a tendency to withdraw from companionship. Four months before admission he had developed fears of contagious disease, had criticized his mother for her failure to observe precautions in the sterilizing of cooking utensils, expressed fears lest through faulty electric wiring, a fire might break out in his school and at the same time had evinced a constant apprehension over the progress of his own and his schoolmates' studies.

The son of an overmeticulous father and a dominant, worrying mother—(who had herself suffered at the patient's own age from an illness not dissimilar to his own)—the patient had been treated as a delicate child. His mother stated, however, that his only sister, an active, outgoing girl of 14, had elicited more of her affection, and the patient had at times expressed dissatisfaction both with this and with his parents' strict attitude towards sex. He had made fair progress in school, but had formed only one close friendship there, and despite some athletic success, was very conscious both of his feeling of inequality with the other boys and of his shyness with girls.

In the hospital he was somewhat uneasy and perplexed, asked many questions regarding the housekeeping arrangements and management of the diet kitchens, and would frequently be seen examining electric switches and radiators on the wards. Often, he was observed standing alone and shading his eyes. When asked to participate in activities he complained that he was "weak," that his ears were drying up and his body rotting. It was difficult to establish rapport with him and progress was, at first, very slow, but he gradually began to discuss, with much hesitancy, certain personal problems. He expressed marked feelings of guilt around erotic preoccupations and felt that because of these he must deprive himself of pleasurable things. This attitude, he explained, had motivated his refusal to play tennis, a sport of which he had formerly been very fond. Certain feelings of inferiority toward an older patient diminished considerably, however, when he at last forced himself to play the other and defeated him at this game.

Following this experience, he was able to speak more freely of his attitude towards this man, and in this connection recalled an experience in childhood when having attempted to run away from home, he had been subsequently punished by his father. At this stage of his treatment, the patient came to his physician with a long list of words—radiator, pipe, milk wagon, fire and others, which he said represented his problems. Week by week as the meaning of each one of these became clear, he would strike it from the list. It was slowly brought out that his preoccupation with fire and with cleanliness had represented in symbolic form his own inner feelings of uncleanness and his guilt over sinful passions. These feelings had led him, at an early stage of his illness, to shade his eyes lest others detect his sin. (The patient's social adjustment at this stage was becoming increasingly satisfactory and his election to the captaincy of a baseball team within the hospital developed new qualities of leadership, and caused him to say that he was now accepted as an equal by other men.)

A letter which he wrote to his physician who at this time, five months after the patient's admission, was temporarily absent from the hospital, is of interest. An extract reads: "We have gotten together a dramatic club—you might call it, if you wish to use that word, which meets every Tuesday and Friday for an hour and a half. One of us brings reading material, such as plays or biographies, and then reads it to the group. I did read a few lines myself. The group, if composed of more people who really enjoyed plays, could be developed into something worthwhile.

"I do not believe you will be interested in this very much, but Saturday the hospital baseball team defeated a team from Towson. It was quite a well-played game—we scored four runs in the last inning and were able to win by 6 to 5.

"I was lucky enough to win the tennis tournament, and received a nice trophy, which had three tennis rackets mounted on a stand, and a tennis ball placed where the three rackets crossed.

"Please do not bother to write me.

Sincerely,

Yours."

One month later, with the aid of the social service department, plans were made for an extramural program, and the cooperation of the family secured, it was arranged that the patient leave the hospital, but continue to live in Baltimore so that contacts with his physician could be continued.

The patient's list of words, symbolizing as he now realized, his perplexity with vital natural problems, had gradually ceased to concern him. He chose his own school, and has since adapted himself well, both to the scholastic and extra-curricular activities. He continues to see his physician at regular intervals.

Summary

In the first case, resocialization of a patient, who was at first considered a poor therapeutic risk, followed removal from the stress-producing situation and the application of a therapeutic program which, satisfied his need for friendly support and permitted the utilization of an almost isolated interest (the development of which later formed the basis of his avocational and social adjustment). In such an instance the importance of focussing our energies, even upon the apparently fixed cases which come under our care, was well brought out.

In the other patients described, opportunities were provided for particular types of occupation, recreation and social environment which filled, in a constructive way, these individuals' special needs, and aided also, through the associations formed, the progress of psychotherapy.

One feels that the application of this more specific type of therapy could, with much profit, be enlarged, but its time consuming nature seems to entail the services of more therapists than are usually available in the psychiatric hospital. As our strength in this direction increases, proportionate benefit to the patient will result.

The efforts to reintegrate the patient, which have been described, seem therefore to illustrate the value of a close coordination and periodic revaluation of the relationship of the therapeutic agencies and it sometimes happens that out of such attempts at integration of our own resources rather than from sudden expansions in our methods, new syntheses for therapy arise.

REGRESSION IN MANIC-DEPRESSIVE REACTIONS*

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Introduction

Regression, defined briefly as a backward movement, represents in the field of psychiatry a widespread tendency, mechanism or process which is not confined to any one mental disease, and which does not necessarily indicate malignancy.

Dementia præcox (schizophrenia) has been commonly thought of as a regression psychosis, and because of this considered malignant. However, we know that although regression occurs in this psychosis, all cases are not malignant. In relation to this White has said that the malignancy of dementia præcox depended on two factors: first, the depth of regression as measured by the psychological history of the individual; second, by the inclusion of archaic or phylogenetic material in the clinical picture. The epileptic attack is a most profound type of temporary regression, and benign stupor, symbolic of death, reveals an acute regression. The loss of responsibility and primitive behavior in the alcoholic psychoses is evidence of regression. Also, we see regression in the organic states—an outstanding example in the senile psychosis, etc.

This paper is offered as a preliminary report of a study of the process of regression, and presentation of some of its material (phenomena) as observed in the manic and depressed states of the manic-depressive psychosis. However, before passing to the clinical considerations, it seems pertinent and essential, in order that one may have a better orientation, to review briefly some of the literature relative to regression, and its significance in mental disease.

Review of Literature

Hutchings in his "Psychiatric Word Book," defines regression as "The act of a backward coursing of the libido to an early fixation because the individual is unable to function at a higher level."

White in his "Mechanisms of Character Formation," states that "regression means failure and that the degree of failure can be

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measured by the degree of regression. Failure means an inability of the libido to find an adequate outlet at the higher levels and therefore it has to seek levels which are older. The path along which the libido has come is the path along which it flows again when, for any reason, it meets with an obstacle which cannot be overcome." He also states in his "Introduction to the Study of the Mind" that as we regress in our thinking, distinctions are wiped out and one thing may come to stand for—symbolize—something else with greater ease." He enlarges on this thought in his "Foundations of Psychiatry" and writes of regressive infantile reactions as reactions away from the demands of reality as represented by society. He speaks of regression as symbolization, a process which, while it allows unconscious strivings an outlet, effectively prevents their recognition by their host.

Jung in his "Psychology of the Unconscious Process" expresses thoughts similar to those of White, namely, "by regression of libido, we understand retrograde modes of application of the libido, a retreat of the libido to former stages."

According to Hinkle in her "Recreating of the Individual," Jung considers the obstacle from which the person withdraws as of an inner or an outer nature. She further states "the halting and interference in the path of progression causes libido to be stored up and thus a regression takes place whereby there occurs a reanimation of past ways of libido occupation, which was once associated with reality." The inference here is that the individual deals with a reality, but with one which is out of season.

Jung further considers that in the symbolism of the dream and the phantasy, there is to be found, not only the regressive longing which would resist adaptation to the demands of reality, but also the clear indications of the lines of individual development leading forward, expressed in the archaic and symbolic language which belongs to the unconscious. That is, he infers, in the wish-fulfilling mechanism both regression and progression is signified.

Psychical regression and progression are contrasted by Tansley in his "New Psychology." He speaks of regression "as a seeking of release from mental tension by the shortest and easiest route, an immediate satisfaction without regard to the future." Progres-

sion on the other hand, "involves a continuous adaptation to reality, and also the creation of an ever-widening environment."

Kempf in his "Psychopathology," indicates that regression may occur to anyone of the various levels of psychosexual development and even to the intrauterine. He infers that the individual regresses "to an earlier type of total reactions-thinking and behavior."

Freud in "Beyond the Pleasure Principle," develops his idea of the death instinct inferring that "the goal of life is death." He points out that all organic instincts are conservative, historically acquired, and are directed towards regression, towards reinstatement of something earlier.

Jones in his "Psychoanalysis," says "Psychologically considered, symbol formation remains a regressive phenomena, a reversion to a certain stage of pictorial thinking, which in fully civilized man is most plainly seen in those exceptional conditions in which conscious adaptation to reality is either restricted, as in religion and artistic ecstasy, or seems to be completely abrogated, as in dreams and mental disorders." He also tells us that "symbolism thus appears as the unconscious precipitate of primitive means of adaptation to reality that have become superfluous and useless, a sort of lumber room of civilization to which the adult readily flees in states of reduced or deficient capacity for adaptation to reality, in order to regain his old, long-forgotten playthings of childhood."

At times in working with our patients it is very difficult to determine whether one is dealing with a fixation or regression, that is, whether the individual has ever attained to the heterosexual level and has regressed, or that the reaction is merely an exaggerated expression of a fixation. According to Healy, Bronner and Bowers in their "Structure and Meaning of Psychoanalysis," Freud says, "Regression and fixation are not independent of each other. The stronger the fixations in process of development prove to be, the more readily will external difficulties be evaded by regression to those fixations, and the less capability will there be to withstand frustrations on the part of reality."

These authors state that "Fixation may be defined as the halting of some part of the libido during the course of its development at

one or another of its somatic positions or zones. In other words, one (or several) of the infantile "sexual aims" or modes of pleasure finding has not been relinquished, that is adequately desexualized or sublimated. Whether or not fixation will occur depends on constitutional, developmental and experimental factors."

They add "In the case of the strongly fixated individual, whether or not regression occurs depends largely upon the occurrence of external frustration, that is, the denial of gratifications by reality to the unfixated libido. Internal frustration is even more important according to Freud. By this he means that, due to the attraction of a strong fixation the unfixated libido cannot reach forth freely to the achievement of mature satisfactions. The individual is, as it were, held back from the gratifications of certain newly emerging desires by the opposing strength of older firmly entrenched modes of satisfaction."

In this book it is also indicated that "Rank points out the possibilities of regression which may occur as related to successive biological experiences of birth, weaning, learning to walk and leaving the parental home. He claims always to obtain regressive phantasies pointing to the birth trauma in his analyses."

Sullivan in his article, "Regression," published in the STATE HOSPITAL QUARTERLY, 1926, states that "cognition, affectivity and conation may undergo regression, also, the ego-ideal, likewise the conscious ego can shrink in a regressive fashion, also, the libidinous extra-egoistic components may regress to preadolescent states." He sums up his discussion as follows: "Regression is thus seen to be a process affecting the mental life of the individual, such that thinking and behavior return to an earlier stage in that individual's historic development, with at least temporary more or less complete loss of intervening acquisitions and developments, and a reorientation by which the present is treated from the reactivated past standpoint, and the intervening mental life completely eliminated as to evident effect, the reality of the present being deformed and rendered practically meaningless owing to the functional loss of much of that from which it has actually ensued. An adaptation or reaction to an unsurmountable difficulty. It seems

to depend for its occurrence, upon a certain dissociation of mental organization-of symbol integration."

In the foregoing there is divergency of opinion but much indicative of a common meeting ground in a discussion of regression, and it serves as a basis for the following study.

Clinical Considerations

The manic-depressive psychosis is not a definite clearcut entity. We are acutely aware of this in our diagnostic strife, and note how it merges into various other psychoses. However, in this study, an attempt was made to exclude all uncertain psychotic reactions, in order to arrive at more accurate, although tentative, formulations.

Original plans called for a review and study of case records of all patients admitted to the Brooklyn State Hospital between the years 1924 and 1930, and diagnosed as manic-depressive psychosis. These years were chosen, instead of later ones, to serve as a basis for subsequent follow-up. But, in view of the limited time to prepare this paper, this proved to be a too ambitious an undertaking, and the plans had to be subjected to modification.

A total of 300 cases were reviewed alphabetically, although the alphabet was but partly covered. The author had personal contact with all these patients in the hospital and also at the clinics, if paroled. Two hundred and fifty cases, 81 male and 169 female, are included in this report. They are grouped as follows: 111 manic state, 31 male 80 female; 64 depressed state, 20 male 44 female; 65 agitated, depressed state, 25 male 40 female; and 10 stupor state, 5 male 5 female. The age range is from 16 to 61 years; about one-third of the total number between the ages of 30 to 40 years, and 32 cases under the age of 20. In respect to the civil status there are: Male: 24 single, 56 married, 1 widowed; and female: 51 single, 92 married, 12 widowed, 4 divorced or separated. There are 70 cases with a history of previous or subsequent attacks.

The remaining 50 cases are not considered at this time, as there were strong implications of dementia præcox or involution melancholia—the type resembling dementia præcox—and because on discharge from parole, the diagnosis was changed, in some instances,

from dementia præcox to manic-depressive or vice versa, as the patient diagnosed dementia præcox appeared to have recovered or the one labeled manic-depressive failed to get along as well as expected. It would appear that we are still, more or less, in the shadow of Kraepelin, as to the outcome in these two groups. These cases, with others, are to be utilized in a subsequent study, and as a part of the completion of the present one.

As no attempt was made, at this time, to follow-up all cases except those remaining in the hospital, the following is merely a matter of record: 174 patients were discharged as recovered, that is, considered as having practically the same mental status as previous to the onset of the psychosis; 24 discharged, as, in some degree improved; 25 transferred to other institutions, and 29 remain in the hospital after three years or more, although several of them have been paroled and subsequently returned.

Outstanding Observations

Several outstanding observations were made:

First, the almost universal presence, in some form of the death motive in the depressed states—all but three showing it. However, it may have been present in these but not noted or indicated by the examining physician. This motive was also observed in some of the manic states, but it occurred in a setting of depression.

Second, the very frequent indication, in the manic state, of the rebirth idea or the phantasied living out of the life of another individual.

Third, regression appears to take place quickly and involving the personality completely in patients still in their "teens."

Fourth, the inability to tell, with any conviction, at least early in the course of the psychosis, from the nature and form of the regression, whether the course of the reaction will be short or prolonged but eventually leading to adjustment, or that it will progress into a chronic unadjusted state.

Fifth, the absence, except in isolated instances, of ideas thought to be archaic in nature, and evidence of direct sexual union with the infantile object.

Other Observations and Comments

Certain histories revealed what might be considered as a profound regression, others a regression apparently mild in nature, but further investigation indicated that some of the former made a quick and satisfactory adjustment, whereas, some of the latter did not do so well or still remain in the hospital. A difference as to adjustment was also noted when comparison was made between members of the same group.

In the majority of patients under the age of 20 the regression seemed to take place quickly and completely, that is, little or no contact with reality being apparent, although many of these were eventually discharged as recovered or in some degree improved. Some observers have pointed out that many of these patients who have the first attack while in their "teens" and diagnosed as manic-depressive are eventually grouped as dementia præcox.

Ideas and phantasies related to anal or other autoerotic practices were noted. They indicate marked preoccupation with those functions which are definitely infantile.

Untidy habits; wetting and soiling wherever they may be; filthiness, such as smearing self and objects with feces; and irritability, perversity and stubbornness especially with the excretory functions, reveal a regression to infancy, and remind one of the development of anal erotism.

The desire to be let alone, sullenness, resistiveness, kicking, scratching, biting, shouting and stamping of feet—resemble a temper tantrum—also, the petulant complaints and demands for sympathy and attention are not unlike the reactions seen in the spoiled or peevish child.

Complaints of constipation; that the bowels do not or cannot move; that they are unable to eat, although many do and steal food when they think they are not observed, reveal marked interest in and fixation at the anal level.

Expectorating, biting, sucking of fingers, gorging with food, etc., noted are indicative of strong oral cravings, and the refusal of food, the frequent reference to poison in the food given as a reason by many patients as to why they do not eat, might be considered as defense reactions against this craving.

A number of observers, among them, Abraham, who has written considerable on this psychosis in his "Selected Papers on Psychoanalysis," have pointed out that regression takes place to these anal and oral levels of functioning. One might infer that the manic patient seems to glory in doing so, while the depressed patient punishes himself.

Masturbation, open and concealed, is a common expression of autoerotic interest. Substitutive masturbatory reactions, such as picking at the nose, rubbing of the ear, and pulling of the lips were also seen. This portrays regression to a period where interest was mainly in personal and bodily pleasure.

Regression to the homosexual level was noted in ideas and phantasies of persecution by those of the same sex, however, these were not fixed or elaborated upon, and in the fearful, apprehensive conduct, of some patients, which developed in a setting of an acute homosexual panic. One patient, after adjustment, spoke of thinking that perversions were performed on her by other patients while she was depressed, and in a condition where she could not protect herself. Another patient, following adjustment, said that she thought some of the women patients were dressed up as men and performed sexual relations with the other women, and that they tried to initiate her into this act.

Some patients were observed as acting as though living in a dream state. They seemed to be so self-aborbed that they appeared to be out of all contact with their surroundings and reality. When questioned they were disoriented, talked in a rambling fragmentary, and at times, senseless manner, followed, as a rule, by amnesia for this period. In speaking of their experiences they made such remarks as "like a dream" or "as if I had just awakened from a horrible nightmare, etc."

A number of patients either mute or having difficulty in expressing themselves because of language disability, were spoken of as resorting to pantomine or mimicry—a reaction occurring in children and primitive man.

Sexual potency was exaggerated in the manic state, in many instances, either in phantasy or the marked erotic behavior. One patient remarked that she had so much sex appeal that she wanted

to be a child again so she could get away from it. On the other hand some of the depressed patients complained of diminished desire or complete loss of it.

In these cases there was no evidence of direct or complete identification with the infantile object, that is, consciously made. However, there was reference to the mother or father attachment, in religious phantasies, visions, and hallucinations. This is illustrated by the following remarks: "I want to be with Christ, God taking her up to Heaven, Soon to join brother in death, Lives in Heaven with father, God has examined my body. I'm the Virgin Mary, Mother of Christ, Bride of Christ, etc." Frequent identification was made with saints. Other patients spoke of being with the deceased father or mother. Again some patients referred to the physician as a lover or sweetheart, and later as father, mother, sister or brother. One patient said that her father gave her poison, later she asked him to shoot her, and another remarked, "I saw my sister in a vision and she seemed to be speaking a language all lovers understand."

Retreat from or desire to be free of the marital state was revealed by denial of marriage; insistence on using the maiden name; denial of wedding ring or marriage certificate; destruction of wedding or anniversary gifts from husband or wife; statements that the husband, wife or children were dead or were to be killed, and that they had come to the hospital to get a divorce, etc.

Although it is recognized that one cannot tell from the appearance of a content whether its origin is phylogenetic or ontogenetic in nature, ideas considered or thought of as archaic, such as the following, were not found, namely, that bodily secretions contained elements of personality; impregnation by operation on the stomach or a seed inserted in the rectum; delusions of eating human flesh, or those indicating ability to control the heavenly bodies, etc.

The Depressed States

The death theme in the depressed states—the tendency to deny life—appears to be an expression of the only way left whereby the patient can escape from his misery and conflicts. It is indicative of regression, in that it portrays the desire to retreat from respon-

sibility; to be out of the world of reality, and to enter into a state where no interest or effort is demanded.

The death idea was expressed in various ways: actual suicidal attempts; thoughts of suicide; fear of committing suicide; the assuming of a death-like posture, especially in the stupor state—a symbolic dying (behavioristic regression); visions of dead bodies; ideas relative to being harmed or killed; of being dead; going to die; the world coming to an end; refusal of food; etc.

The fear of being killed is thought to be a projection of the idea of death—a reaction to an unconscious death wish.

One patient spoke of being dead and in her casket; another said, "I never think of life but death, there is a grave prepared for me, life is not worth living;" still another spoke of "sleeping like a dead person."

In reference to sleep, many of the patients complained of insomnia, other actually could not sleep or stated they feared to sleep as they might not wake up. According to some observers, insomniacs, are those in whom there is an unconscious wish for death.

The utilization of the death idea was also noted in a different setting. Expressed in such thoughts, as a fear of killing members of the family; beating up people; that the mother, father, husband or wife, etc., was dead. Statements were made as "I killed everybody" and "Everybody is going to die because I am so bad" (omnipotence or all-powerfulness). Resentment against everyone and everything was displayed by some, and others made homocidal and violent attacks on those about them. The latter reaction noted more often in the manic state.

The feelings of guilt so often expressed after such thoughts and behavior would appear to result from a repressed attitude of revenge and hatred—a manifestation of the sadistic organization.

In contrast the masochistic tendency was observed in the passivity of some patients; the apparent enjoyment of their suffering as indicated by the constant thinking or talking about themselves and their troubles; again shown by self-mutilation or injury, such as, scratching, picking at the face or body, pulling our hair, biting of the fingers, pounding and striking various parts of the body, etc.

Again evidence of a backward movement of the individual's feel-

ings, thoughts and behavior was noted, in mutism, negativism, a desire to be left alone, as if seeking seclusion from the world; a general flattening of emotional reactions; marked self-centeredness and indifference to others; a dwelling on childhood events and experiences long forgotten—with feelings of regret for not taking advantage of opportunities in the past life—with apprehension as to the present—and feelings of insufficiency and inadequacy as to the future; expressions of feelings of loss of reality, reputation, family and fortune, etc., and preoccupation with ideas of somatic discomfort. All of this indicative of a withdrawing from outside interests and objects into self.

The Manic State

The manic state of the manic-depressive psychosis has been referred to as a form of intoxication, and in it we see a dramatic portrayal of the emotional reactions and behavior of the child.

In this condition was noted the tendency to increased irritability, with a volatile, flighty pressure of physical and mental activity, and a care free and unrestrained cheerfulness and gaiety of the child. All feeling of restraint seems to be removed, and the sadistic component appears to have free play resulting in aggressive, reckless conduct, sudden outbursts of violence, destructiveness and anger.

There was also expressed in speech and behavior, a feeling of power, self-importance, and a grandiose trend which can be compared to a childish egotism as observed in a child's boasting and bragging.

The case histories frequently referred to childish conduct; mischievousness, playfulness, stealing and fabrication; a playing with words; a childish "babyish" vocabulary with the quite frequent use of the words papa and mama. The free use of profanity, obscenity and vulgarity also noted is indicative of a regression to a state free of inhibition, and to a period of development in which sound was omnipotent.

Exhibitionism is a prominent feature. It is shown by nudism; exposure of the genitalia; the flirtations, coy and erotic attitude assumed by many; the dramatic, affected behavior of others, and

the tendency to decorate self to a marked, fantastic degree. Dancing, singing and behavior apparently intended to attract attention often observed. Many of the dances and actions described bear a striking resemblance to the behavior of primitive man. In this connection, reference was made to patients assuming terrifying, awe-inspiring facial expressions with the apparent intention of frightening those about them. This reminds one of the facial and bodily decorations made by primitive man to strike terror into the hearts of his enemies.

The rebirth idea so frequently expressed is illustrated by remarks such as, "I'm spiritually or symbolically in company with all the saintly and heavenly, and I am going to be born over a new man." "I thought I was asleep, woke up in Heaven, and then I felt I was born again." "It was like a mist before my eyes, it rolled away, and I saw things clearly as a child and I began to live anew," and "I'm still wearing diapers, but I'll grow up and be a better man." There were many similar remarks including the one so often heard in a setting not considered psychotic, namely, "Oh! if I only had my life to live over." The behavior was noted as being in accord with the thought content. This rebirth idea also occurred in the stupor state.

Reference was made to being someone else, such as, Cinderella, Robinson Crusoe, the President, the wife of Captain Kidd and many others, with what appeared to be an attempt to act and talk as the patient conceived these personages did or would, nevertheless, with an appreciation at times, that their conduct was "make believe." This is in contrast to similar situations in dementia præcox where reality is more or less consistently ignored.

White in his article "The Language of Schizophrenia," published in Vol. V, Association for Research in Nervous and Mental Disease, in speaking of regression says, "I like to think of regression as a dropping back to the use of a simpler type of machine for handling reality. Reality poured into this simpler machine must result in different products than if poured into the more complex higher type of machine."

It would appear that the manic-depressive makes use of this simpler type of machine and its more simple products in his regres-

sion, just the same as the dementia præcox patient does, however, the process is more understandable.

Freud, Abraham and others have advanced the opinion that in depression the super-ego exercises the function of criticism with excessive severity, tyrannical and punishing the ego, and that inhibitions are forcibly stressed, whereas the manic throws off the yoke of his super-ego which no longer takes up a critical attitude toward the ego, but is merged with it, and that all inhibitions are swept aside. The observations made in this study are in agreement with such an opinion.

Conclusions

The material of this paper does not lend itself to a discussion of prognosis and diagnosis, except in an impressionistic manner, in fact, much of the content of the conclusions to be submitted relative to regression is also of impressionistic fabric and tentative—awaiting further study.

As a result of this study, bearing in mind the above, the following conclusions are offered:

There is a regression of the individual's thinking, feeling and behavior in these states to levels of development which are older. This regression varies in the individual case, and can only be measured by a more or less complete knowledge and understanding of the psychological history of the person involved.

It appears that the general goal of regression differs in these states; negation of life-death, in the depressed, and, to begin life anew, in the manic. These opposed reactions may occur in the same individual during the course of an attack, without regard to sequence, or one may appear in one attack, and the other in a subsequent one.

Evidence, is noted, in many of the cases, of failure to outgrow the instinctual phases of both the anal and oral organization, leading to a turning away or retreat from interests in or relationships to objects outside the individual, to self as the object, for one's own needs and satisfactions, namely to a state of narcissism.

The inability to foretell with any degree of accuracy from the nature and form of regression alone, as to the outcome, may be because what is assumed to be deterioration is more apparent than

real, or in other words, the fixation at the level to which regression has taken place may be weaker or stronger than surface indications in the given case. This leads to the opinion that no patient should be considered hopeless as to therapy because of apparent profound regression, and also, that no case should be ignored therapeutically because of what appears to be a mild regression.

However, in spite of the above, the presence of marked preoccupation with somatic complaints and the free use of the mechanism of projection, seem to carry with them, at least, a guarded prognosis as to a satisfactory adjustment. These factors would seem to indicate a very strong narcissistic fixation, and an unwillingness to admit the personal source of the difficulty.

Suicidal attempts per se do not appear to be an omen of poor prognosis, as some observers have indicated, although in instances where the attempt occurs as the result of alleged persecutions, the course seems to be prolonged and if adjustment takes place, it is an unstable one. This type of suicidal attempt is frequently observed in dementia præcox, especially of the paranoid type. One might paraphrase the patient's thoughts as follows, "I won't let them harm my body, I'll take my own life first." Again one thinks of a very strong narcissistic fixation.

It would appear that ideas considered archaic, and evidence of direct sexual union with the infantile object, occur, if at all, rarely in these states. Their presence should make one hesitate, at least, as to a diagnosis of manic-depressive psychosis (types studied in this review.)

As to the observation that many of the patients under the age of 20 appeared to regress quickly and completely, it might be inferred that they have not had sufficient time or opportunity to develop defense or compromise formations and sublimations, to act as buffers to the retreat from reality.

Advancing age appears to be conducive to diminished object libido and a retreating more into self, so that, a number of patients between the age of 50 to 60 in this series seemed to make little effort to progress. The apparent lack of incentive to get well seemed more marked in this age period.

The civil status seems to bear no relationship to the process or

phenomena of regression except that in a number of instances the marital state appeared to be the obstacle which the individual could not hurdle successfully, and the content of the regression was colored by evidence of the desire to be rid of this situation.

Finally, although much of the phenomena of regression as revealed in this study has been noted as occurring in dementia præcox, one has to consider causation, setting, and the life history of the individual involved, that is, the reaction as a whole cannot be interpreted merely in terms of regression.

PRECIPITATING FACTORS IN MANIC-DEPRESSIVE PSYCHOSIS*

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A Study of 25 *Cases*

The material for this study has been selected on a basis of relative completeness of the history, availability of informants for its amplification where necessary, and accessibility of subject to probing of conflicts. In common with other investigators the writer found it advisable to omit from this survey many cases that had been considered manic-depressive, but which showed on prolonged study such admixture of schizoid traits as to raise doubts as to the classification.

At the outset it was apparent that the search for one specific factor in causation was a futile one; we see rather a multiplicity of circumstances, often relatively trivial in themselves but reacted to with increasing emotional tension until at last an insignificant happening may ignite a veritable mine of pent-up emotions. Then, too, it is often the imponderables that go to make up a trying situation —the interplay of personalities which creates the feeling-tone of the home setting. Physical conditions play their undoubted part, often in undermining resistance, occasionally as the outstanding precipitating factor. Burdened heredity seems to play a part in the mind of both patient and family. It is noteworthy that in the opinion of relatives or other lay informants, physical factors tend to take precedence over all other elements, with heredity a close second.

Twenty-five cases of manic-depressive psychosis, 12 men and 13 women, were studied. Of the men, 4 were elations and 8 depressions; none showed extensive trends, but all presented intense emotional disturbances. The personalities were rated as cyclothymic, with two exceptions, of these, one had about equal division of schizoid and syntoid traits, the other a preponderance of schizoid elements. Among the women, 5 were elations, 4 depressions, 2 circulars, 1 mixed and 1 stupor, with personalities rated cyclothymic in all but 3, which had qualifying schizoid components. Trends were

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subordinate to affective aspects. In 6 women and 4 men, we were dealing with initial attacks; previous episodes, while often not grave enough to necessitate hospitalization, were yet sufficiently marked to excite comment and concern on the part of relatives; the number varied from 1 to 10, the majority being 2. Direct hereditary taint appeared in 12 (3 men and 9 women); collateral in 2 men. It is noteworthy that among the women, 4 had both parents seriously deranged and that the emotional stress of this burden ranks high as a contributing factor to the psychoses under investigation. An estimation of the degree of insight into mechanisms was made in personal interviews, where the precipitating factors as given in anamneses were checked with the subjects' accounts of the prepsychotic situations, their mental and physical states then and in the early stages of the psychoses. Ages varied from 18 to 47 in the women; from 21 to 59 in the men; averages 34 and 42 respectively.

A few generalizations can be made. Even in so small a group, sub-groups tend to appear—3 rural men of well balanced personalities, farmers or dairymen, whose depressions coincided with bad farming conditions and the attendant financial stress; 2 high-pressure salesmen, Jewish, extremely expansive in personality, with previous attacks of elation, for no specific causes; 3 registered nurses with heavily-burdened heredity, emphasis being laid by them on this factor as a constant source of worry to them lest they also develop similar conditions; 3 young married women in whom delivery of an unwanted child was the inciting factor; 2 farming women for whom a combination of physical depletion and deaths in the family proved unbearable; 5 men unable to obtain employment, though previous to the depression, steady workers; the group of 9 before mentioned, which includes some of these just listed, where the heredity was at least an underlying anxiety and in one instance, the main factor in inducing 2 excitements—a girl of 18, both of whose parents are psychotic (paranoids), whose attacks coincided with her mother's hospitalizations.

Somatic accompaniments to the psychoses appeared in all but 3 women and 5 men; they resolve themselves into those directly contributory (pregnancies, toxemia following teeth extraction, arterio-

sclerosis); those usually found associated with depression (loss of weight, headache, gastric symptoms); and a group of long standing stresses unrelated to the illness.

Turning to individual consideration of operative causes, one finds the subjects themselves more inclined to stress psychic factors than to dwell on their physical states, unless in situations where the one followed closely on the other. For instance, one of the farmer group, a man of 45, married, with children, enters into a discussion of his psychosis, a first attack, with the utmost frankness and excellent insight. Although his mother was a woman described as "highly nervous" but not bad enough to hospitalize, he had not concerned himself with that aspect of his inheritance, considered himself always an easy-going person, fairly extroverted, not given to moods, satisfied with his mode of life and his family, especially proud of his youngest son. Then in quick succession came a series of calamities—the death of his favorite son, in whom all his hopes of a worthy successor had been settled, since the older boy had taken to drink and was proving himself to be vacillating in character; the total loss of several farm buildings by fire; the wife's illness followed soon after, her hospital care making serious drains on the scanty bank account; several loans were established as uncollectable, and the general state of farming so discouraging that it was a grave question whether the family could subsist at all as affairs stood. Through failing appetite he lost 19 pounds in weight. He developed gastric symptoms, grew daily more wretched, saw no reason for living and lapsed into a retarded depression, in which even the physical discomfort faded into general numbness and only the death of his son retained distinctness of outline. In looking back over his illness, this man recalls no unusual thought processes; none appeared during the psychosis to give us a clue to possible buried factors. When asked if he thought he could have weathered this series of calamities had anything in the situation been different, he admitted that he might have fared better had he had the same psychosexual rapport with his wife that had marked their earlier years together. They had been slowly growing apart, without open friction, since the wife's hysterectomy and subsequent frigidity. He did not consider it honorable to resort to extramari-

tal relations, and so depended more and more for emotional outlet on his young son, whom he described as "my chief hope and pride." The wife, meanwhile, was championing the older son, making excuses for his behavior and acting as buffer between them, a reaction which the patient understood but could not condone. He felt completely isolated in his grief.

Deep-seated dissatisfaction with their work is offered as the chief cause of the psychosis in 4 cases, all men—one a lawyer who had perforce been working as an insurance agent, putting in longer hours, with more expenditure of energy and less pay than ever before; another a milk dealer, in his fourth attack, all 3 previous episodes having followed on changes in occupation; a third, a young newspaper reporter who aspired to the stage but whose histrionic talent had achieved recognition only in high school (in his first attack he stormed the manager's office of one of the theaters in town, demanding an acting part in the show); a fourth, a shipping clerk who had spent most of his adult life running a hotel but who had been forced to take a job involving hard physical labor with long hours, engendering in him a deep-seated feeling of failure—"Once a successful hotel man and now a common clerk." It is apparent that wounded pride with self-pity and pronounced feeling of inadequacy constitute the psychic basis of the dissatisfaction.

Occupation is important in the case of a veteran of 30, who had had no trade before he entered the service at 17, who can do nothing well except fly, while there are no calls for his talent at home. This boy had tried to study medicine but found himself "too restless." A dominant mother was determined that he should not leave home and neither should he take a job as pilot because of the hazard to his life. He made an attempt at suicide by drugs, defying his mother. It is noteworthy that this man is now a successful pilot, regularly employed, living away from his mother; entirely recovered from his depression. In reviewing the precipitating situation, this young man was aghast at the extent to which he had permitted his mother to order his life. With no hint from the writer, who had had several interviews with the mother prior to patient's admission, and had estimated her will to dominate the boy, he readily arrived at the conclusion that drastic changes in his mode of life

must be made if he were to avoid permanent mental illness. Indeed, his make-up—sensitive, shy, eager to have social contacts but unable to take the initiative and break away from his limited small-town environment and all-pervading family—inclined one to the opinion that here was a person very likely to develop a schizophrenic psychosis if too heavily burdened. Then, too, he had a serious homosexual attachment, begun during his war service. The young man's death shortly after the war was borne without outward demonstration of the keen grief he felt. Prior to the war he had become engaged to a girl whom he found anxious to be released on his return home. Without regret, he allowed her to break the engagement and ever since has been glad that he had not had to go through with marriage. He has realized to a certain extent his sexual abnormality but does not admit marked inferiority-feelings on that score; rather he stresses his mother's solicitude and exacting supervision. "Why, it got to the point that she even thought for me." While he blames himself for tame submission when he knew he should rise in protest, he offers the excuse that he could not bear to hurt his mother's feelings. His brother's wife sensed his difficulties and offered her home as a half-way house; but while there he made the attempt at suicide. The analytical significance of his choice of a profession—flying—is appreciated by this subject. Perhaps his present mental health can be explained by the fact that he has found a way to continue in that occupation. Why, with the background described, this man went no further than a retarded depression without delusional formulations is not clearly demonstrable. The subject himself felt that he had shown some initiative in making the attempt at suicide, acknowledged that the initiative could have taken a more satisfactory channel and determined to try again along socially accepted lines. So far he is succeeding, after a lapse of two years.

Another case of interest is that of a young woman of 25, unmarried, registered nurse, whose life has been made stormy by a combination of endogenous and exogenous factors. Her parents, both psychotic, mother paranoid, father depressive, have lived in the utmost disharmony with the result that the two daughters have divided allegiance, whereas the two sons have broken entirely from

the home. Grandparents on both sides showed psychotic traits, the maternal alcoholic and paranoid, the paternal depressive, much as in the case of the girl's father, and now in our patient herself, who has lived in fear of becoming insane. The first attack occurred as an echo of her father's episode, in which he was displaying exaggerated indifference to her, even to refusing to answer a sick call from her employer, in whose home she was working as domestic when taken with a grippy cold. Even prior to this, she had shown her dependence of the father's moods and demonstrations of indifference. One day, when she was 14, walking home from school, she met a neighbor of about her father's age, who asked her to ride. She was repulsing him with an answer to the effect that her father wished her to walk, whereon the man said he had just inquired of her father for her and had been told that he did not care where she was or what she was doing. She accepted the offer to ride and then began a series of meetings. The man was arrested for rape, on her father's charges. The second frank depression followed a similar episode. She had been accepting the attentions of a man whom she definitely recognized as a father-image—he looked just as her father had, in her early happy days, and was also a railroad man like her father. There were no intimate relations. When this man showed signs of turning his affections elsewhere, she gave herself to a casual acquaintance from whom she contracted gonorrhea. The depression followed the realization that she had given her father another reason to repulse her. The third attack which led to hospitalization, has no one dramatic episode as precipitating factor, but rather a series of frustrations, more or less the result of her own unstable temperament. While taking a post-graduate nursing course she finally broke. She had half-consciously fallen in love with the younger brother of the physician who had interested himself in her from childhood and who was responsible for her taking up nursing. Very unwillingly she gave up her job as operating room nurse in a small hospital under his direction, to take the post-graduate course, at the suggestion of the older physician. She began to realize that her love-life was doomed to frustration, and sought the reasons in herself. With conscious effort to disinterest herself in men, she turned to her roommate in the nurs-

ing school, but was repulsed by her. Then followed the conviction that she could never be successful at anything she attempted. She resigned, returned home, attempted suicide and was brought to hospital in a retarded depression. Now, as she is beginning to pull out, she has developed excellent insight, and so also has her father, after repeated interviews at the hospital. It is perhaps too early yet to congratulate ourselves on the successful outcome of this case, but at present writing the future holds out a hope for an ultimate satisfactory adjustment.

The three post-partum cases all had mothers whose mental ill health had seriously warped their early lives. One of these, who came to us in her second attack at 23, had had her first depression at 15, when her mother was hospitalized in a manic excitement. She had felt that she should never marry but became illegitimately pregnant and was coerced to marriage by her father. The depression, characterized by a deep sense of sin and an urgent necessity for atonement, followed the difficult forceps delivery. An elated young woman whose mother had been hospitalized as a depressed manic, had also lived in fear of becoming deranged and stressed fear of commitment in her early productive stage in hospital. She had not wanted the child, her second, both in fear of possible inheritance of mental weakness and because of financial stress. She was greatly depleted in physical strength and had lost 25 pounds in weight. The third, a depression, had an alcoholic and temperamental father and a psychotic mother, neither hospitalized, but a paternal uncle had died in an institution. This girl had perhaps the liveliest dread of the three, for she thought her own highly erotic make-up an indication of weakness. She married when pregnant a man she considered "smart" because he was in college; her logic was that a really smart person was mentally sound. When the husband lost his work and his morale failed, she was convinced that she had made a mistake. After delivery of the child she became depressed, thought the child as well as herself was psychotic and passively gave herself up to her fate.

It would be tedious to resume in detail all the cases studied. Suffice it to say that analytical interviews brought out abundant material often not even hinted at in the anamnesis. The duration of the

period of stress was without exception much longer than observers had noted. It is surprising how long many of the subjects presented a virtually untroubled exterior to the world, while torn with conflicting emotions. Many might have avoided the final break had the times been more propitious. It is conceded that present economic conditions are tending to increase the emotional tension in the home; even when real want has not to be faced, the lack of employment has thrown the various members of the family into closer association, often with dire results.

Summary

Well-defined precipitating factors appeared in all but 2 cases; in these, markedly cyclothymic personalities existed, with waxing and waning of erotic tension, the psychoses following upon amorous situations in which the subjects found themselves at a disadvantage.

Heredity was negative for mental disease so far as we could ascertain in 13 of the 25 cases; heavily burdened in direct line in 4, collateral 2; one parent psychotic in 8. The significance of this heredity appears to lie in the extent to which it has acted as a source of worry to our subjects, either through daily contacts or as a legend.

Insight into the meaning and mechanisms of precipitating factors was better on the whole in the depressed subjects, though at least 3 manics gained unusually complete insight after the elated episode had passed. The gravity of the psychosis is more often conceded in the depressions than in the elations.

Some degree of physical depletion, if only a loss of weight, obtained in the majority of cases—only 4 out of 25 showed no change in physical health.

Worry is the prime factor voiced in analytical conferences—whether over heredity, loss or change of work, death of relatives, illegitimate or undesired pregnancy, heavy responsibility in work or at home, illicit or frustrated amorous episodes, financial stress. Mechanisms are, or appear to be, often simple and readily understood; efforts to educe other than the "good reasons" offered have been fruitless. On the other hand, there is a group of considerable

size where the "real reasons" have been found, cloaked in more or less misleading terms—physical illness as in the puerperal cases, or loss of work, or "the depression." These comprise (1) unconscious fixations on parent or parent-surrogate, with ambivalent emotional overtones; (2) thinly disguised or frankly admitted homosexuality; (3) marked sense of inadequacy or inferiority; (4) craving for love, home, offspring, vigorously suppressed (in five instances at least) because of qualms over hereditary taint; (5) sexual inadequacy of mate. It is conceded that these conflicts appear in the genesis of other types of mental disorder and are in no way specific for manic-depressives.

Where previous attacks occurred, the precipitating factors were much the same either in actual circumstances or in producing similar emotional stresses. In the case of a woman who had had 8 previous attacks, however, there was a steady diminution in the significance of the assigned precipitating factors—from shock at onset of puberty for the first, through unhappy love affair, death of brother, public recognition of insanity of mother, death of mother, separation from sister (mother-surrogate), up to the last two, which the patient claims "just come on me." She admits, however, that at these times her usually suppressed longing for a companion and a home of her own is insistently present in consciousness.

No one factor appears as a determinant, either in precipitating the psychosis or in indicating the path it will follow. On the whole, however, the elations were most marked where the personalities had a hypomanic element; the circulars (2) and the mixed (1), had an almost equal division of schizoid and syntoid personality traits; the stupor (1), a definitely cyclothymic make-up. In one elated young woman of syntoid personality, the recognition of homosexual urges appears to have been the factor which set in motion a vicious cycle of overactivity in work and in social diversions.

From the material in hand it would appear that the precipitating factors resolve themselves into 3 groups:

1. *A feeling of insecurity,* whether based upon
    1. Financial strain
    2. Social disapproval

3. Physical handicaps
4. Fear of family insanity.

2. *The stirring up of conflicts,* either by a particular situation, or a lowered resistance which makes suppression difficult, the conflict then associated with a feeling of *guilt.*
3. *Self-pity,* resulting from thwarted self-expression.

These factors clearly are no different from the precipitating factors in any other mental illness; the form which the psychosis takes must depend on some endogenous factor, whether hereditary predisposition, physiological alteration or personality traits, the determinant yet to be established.

PRECIPITATING FACTORS IN MANIC-DEPRESSIVE PSYCHOSES

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In this paper a series of 70 cases of manic-depressive psychoses is reviewed. An attempt is made to show the relationship between precipitating factors and underlying mechanisms. The cases selected are those with which the writer has had contact within the past four years. He did not have the opportunity to study the cases when first admitted, as the Creedmoor patients are received solely by transfer. The writer made an attempt to review those cases, which could, as nearly as possible, be approached from an analytic standpoint.

The precipitating factors themselves were diversified and peculiar to each individual case. It has been necessary for the writer to classify them along rather broad lines, but a brief description is made of such cases whose mechanisms and dynamics are fairly well defined. It happens to be that the female cases greatly predominate, there being 53 females and 17 males.

The writer found in his series that the precipitating factors fell into seven main groups, and these are tabulated as follows:

PRECIPITATING FACTORS IN MANIC-DEPRESSIVE PSYCHOSES

	Male	Female	Total
Marital maladjustment	4	19	23
Death in family	2	10	12
Childbirth	0	8	8
Physical condition	3	5	8
Economic stress	4	3	7
Antagonism toward parents	3	3	6
Sickness in family	1	5	6
	17	53	70

MARITAL MALADJUSTMENT

Twenty-three, or nearly 43 per cent of the series, showed domestic strife in one form or another. Family friction, desertion, or infidelity were frequently recorded as etiological factors for statistical purposes. During the acute phase of the psychosis such behavioristic manifestations were noted that the patient threw away

her wedding ring or some other form of conduct was observed, indicating an attempt to escape from the domestic dilemma. In her trend reactions the patient believed herself to be married to someone else, saw her husband dead in a casket, or had recurrent dreams of the death of the husband. In many instances upon recovery or when the patient was able to leave the hospital a desire was expressed to return to the parental roof or to the home of a brother or sister. Frequently the husband or wife acquiesced and the parole was so arranged. During the parole period the patient usually expressed entire satisfaction with the changed environment and there was no indication of a wish to return to the former mode of living.

From a dynamic standpoint, we would expect to see, in all cases, a fixation at the narcissistic or homosexual levels, or that the Oedipus or Electra complex played a prominent role. While this was true in many situations there were also several cases wherein the motivating forces of the psychosis were chiefly sociological.

The writer had an opportunity in several instances to confer with the husband or wife of patients belonging to this group. It was usually found that the patients' statements of dissension in the home were true. Furthermore, brutality, infidelity, alcoholism, callousness, and other undesirable traits in the husband or wife were brought out by the social worker's investigation.

One patient's attack developed during the celebration of the nineteenth anniversary of her marriage. She turned against her husband, removed her wedding ring and exclaimed "Let him drop dead!" When the patient died suddenly while out of the hospital (on parole) the husband evinced no emotion other than his concern over obtaining the money she had left.

The husband of another patient was tried and convicted of sodomy committed against the son of the patient by a former marriage. The wife of one patient consorted openly with another man and finally left the patient. He became, according to the history, psychotic on the day of her desertion.

A study of such cases revealed very little when an attempt was made to bring out the underlying mechanisms. Frank sexual incompatibilities were cited in the histories of but three of these patients. Impotence on the part of the husband was found to be

the precipitating factor in all three. One patient went to live openly and defiantly with another man, another insisted that the physician give her a certificate regarding her husband's weakness, while a third returned to live with her own people.

Evidence of marital madadjustment was not always obvious when the history and mental status were first recorded and the precipitating factor seemed to have no relation to the submerged trends which were brought to the surface in the course of time. Such a case is now cited. The patient was a young woman of 26. The precipitating factor was given as "a bite on the arm received in altercation with a woman in the neighborhood." Although the patient was injured she was considered by the judge to be the aggressor, and she was reprimanded by him. Following this she persisted in writing love letters to the judge who finally ordered her held for observation. On admission she showed a well-defined manic reaction. The writer interviewed her after her attack had subsided to a considerable degree. She said: "I fell in love with the judge, I couldn't help it. He was old enough to be my grandfather but it seemed I had to write to him. I know it was foolish." She said she had no use for her husband. Prior to her marriage to this man she was involved in certain fondling episodes with him. She told her mother who made them marry. The patient had no love for her husband. His health was poor and he always complained of stomach trouble. There was a constant desire to escape from her difficulties.

In analyzing the case we see in the psychosis a cropping out of the father fixation. She falls in love with the judge, the father surrogate. The precipitating factor, although seemingly remote, is closely connected with the ensuing development. Three patients in this group complained of the marriage being forced upon them, as in this particular case.

Death in Family

Twelve patients are included in this group and ten included those situations which involved the death of the parents or, as in one case, the parent surrogate. It was revealed in those cases in which the history was carefully taken that there was a strong underlying father or mother fixation.

A young woman developed a manic attack shortly following her father's death. When she recovered she said she had idolized him. The history revealed that she had had a previous attack at 15. In discussing this first attack she said she became disturbed when she feared a man would strike her father. Strangely enough the trend of her psychosis showed a marked antagonism against the father surrogate. When she was in court she cursed the judge and during the psychotic phase, while in the hospital, she was bitter in her attitude toward the doctors; possibly a striving against this father love.

Another woman of 30 developed a depression immediately after her mother died. She remained in a semi-stupor for two years and then quickly recovered. Analysis after recovery revealed a strong mother complex. There was also a homosexual coloring in a sublimated way. She had refrained from many activities, believing they would interfere with her mother's welfare. She eventually made a good adjustment. In a conversation with her a year or so later she said: "I can see now I should have had more pleasure out of life."

Childbirth

Eight patients belong to this group. Psychologically a majority of these women, who could be studied with any degree of thoroughness, showed a striving against meeting the demands of a heterosexual situation. Histories that were carefully taken showed much friction between the husband and the patient. In some instances the patients, during the attack, dramatized the death of the child. In some situations a hatred of the husband was expressed. After recovery the patient would often say she wanted no more children, or she did not want to return to her husband. One woman, who was more accessible to analysis than the others, said upon recovery she had always had a fear of child bearing. She had had several previous attacks. In the history of her last attack it was stated that a suicide of a friend, in the apartment house in which she lived, was the precipitating factor. She related that when she was six years old a boy twice her age tried to rape her. She was badly frightened and as time went on she developed an overpowering fear of having a child. She married a man whom she describes as

spineless, and he was dominated entirely by his own people. In 1921 she found she was pregnant. Her old fears of pregnancy multiplied to such an extent that she went to a physician who gave her an abortifacient. The drug was ineffective and she quickly lapsed into a stupor. She recovered within a few months. In 1922 pregnancy again occurred and she went to full term. Shortly following childbirth another manic-depressive reaction made its appearance. The psychosis was of a few months' duration and recovery again took place. In 1929 her 7-year-old daughter confided to her that on one occasion an old man fondled her in a sexual way. This so terrorized the patient that she was thrown into a manic attack. At that time the prevailing idea was that her daughter's life would be a repetition of her own. When the suicide of the friend was brought up she said at that time she was controlled by the thought that her husband would do the same thing. Throughout the analysis it was obvious that she regretted her matrimonial experience, and in reference to the precipitating factor the writer felt it was a matter of a sense of guilt in wanting to rid herself of the husband. The early sexual trauma appeared to be the motivating force in her attacks.

In all of the childbirth cases, toxic features could be ruled out.

Physical Condition

Eight of the 70 cases showed some definite physical condition as the precipitating factor. These cases were difficult to analyze. The cause was very clear to the patients, they accepted it at its face value and there was a conscious or unconscious resistance to analysis. They simply said: "I had an operation and had a breakdown," "I was in an automobile accident and was hurt," "I had pneumonia," or would give some other statement relative to the injury or disease process. One woman developed a depressive reaction after she learned she had a cancer; a diagnosis of mediastinal tumor had been made. She adopted an attitude of futility and despondency. One woman became depressed following an injury to her leg. She believed she had developed cancer. In this particular case it was brought out that she had been having considerable trouble with her husband, who was an alcoholic.

In the trend reaction of the majority of these cases there did not appear to be a relationship to the physical state which was responsible for the psychosis.

Economic Stress

Financial stringency, or loss of employment appeared to be the activating agent in 7 of the cases. When the cases were carefully revieved it was found that certain emotional forces were brought into play by the straitened circumstances. One man, who had been employed on a newspaper staff, had his salary greatly reduced when that newspaper merged with another. He had always been worrisome, irritable, and rather narcissistic. As his psychosis developed he would not permit a newspaper or periodical in his home. His home life was unhappy and his wife, from our investigation, was found to be grasping and totally out of sympathy with him. When he was on parole she had him arrested for non-support. A woman became depressed because she could not earn enough money to continue to support her father. The analysis showed a pronounced father fixation and she had permitted herself to be overruled by him throughout her life.

Antagonism Toward Parents

Six patients showed a marked antagonism to either the father or mother, and they were so grouped. All of these patients were quite young. In the case of the young men it was a revolt against the father and in the case of the girls the psychosis was evinced by a display of animosity toward the mother. The precipitating factor was not easy to disclose in these cases, although the picture presented made the dynamics of the situation quite obvious. The agent that brought it about was not always clear. Such a case is cited as follows: An Italian boy of 19, with a pronounced manic reaction, showed a belligerent attitude as far as his father was concerned This was well defined during the active phase of his psychosis and when he was in a comparatively subdued state while on parole. The psychosis itself seemed to have flared up spontaneously. The writer established close contact with the father as well as with the patient. The father was domineering, narrow and allowed the pa-

tient but little latitude. During clinic visits a row invariably took place. The father would unnecessarily rebuke the patient who in turn would curse his father roundly. One day, during the clinic visit, the patient said that the moving picture "Dracula" caused his trouble. He said, "I got awful nervous after I saw that picture. When Dracula sucked the blood out of the girl's shoulder two women screamed, but what scared me most was when I saw him in the coffin in the cellar. When I was in bed that night I couldn't get it out of my head that my father was Dracula. I got up and looked at my father. I went back to see the picture again and I knew that Dracula was my father, and—well, I guess that brought me here."

Here we see the wish for the father's death, dramatized by that rather gruesome picture. Incidentally, this picture "Dracula" played a role in the psychosis of several patients with which writer had contact. Dracula was usually the father or the father surrogate.

Sickness in Family

Brooding over the illness of some member of the family was the outstanding factor in the early history of six of the patients. Identification with the member who was sick was in some cases the underlying mechanism. I will briefly quote one case. One woman who had been caring for her blind father for years, became obsessed with the fear that she too would become blind. During the psychosis she frequently referred to her eyes and her fancied failing vision. It happened that the members of this group did not react very well to analysis.

Conclusion

The precipitating factor was closely related to marital maladjustment in some form in a great majority of the cases studied. This factor is often the keynote of the psychosis. The writer feels that more stress should be placed upon this particular feature of the psychosis, as it aids in analyzing the situation as a whole. It might be well to bear this in mind when the histories are taken and when the psychiatric examinations are made. In the taking of anam-

neses too little thought is given to this and also in the working up of the case itself; most important of all it is helpful from the standpoint of therapy.

This grouping is only arbitrary and was made as a ground work for the study of this particular activating agent. The writer was impressed by the idea that in most of the manic-depressive cases there are ever present inflammable complexes in the unconscious which are waiting to be ignited by the proper precipitating factor.

PROGNOSIS IN MANIC-DEPRESSIVE PSYCHOSES

With Report of Factors Studied in 493 Patients

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The question of prognosis in the manic-depressive psychoses has been extensively investigated by many observers and much has been written on the subject. Undoubtedly the most valuable of the earlier contributions came from Kraepelin[1] whose masterly description of the condition is known to all. Through his wide and penetrating studies of the disorders to which he gave the name we now use, this keen observer gained such good insight into the prognosis that later writers have generally accepted the opinion expressed by him about 1890. In his textbook on psychiatry, Kraepelin says "The prognosis of manic-depressive insanity is favorable for the individual attack. For long the prospect of recovery, especially in manic excitement, has been considered very good. With this the circumstance may be connected that mania is primarily a disease of youth. In fact one may, even after very long duration of excitement or depression, with reliable diagnosis, still hope with great probability for complete restoration to health . . . Cases running their course in the two forms show the greatest tendency to frequent repetition. The commencement of the malady with a double attack will therefore, make the prospect for the future appear more unfavorable. A series of attacks following one another without interruption and changing repeatedly in coloring must be regarded as specially critical. . . How far the clinical peculiarities of an attack to some extent allow reliable conclusions to be made as to the further form of the morbid state is up to now still quite obscure. Perhaps however, with very extended observation some prognostic rules may be got, although the incalculable influences of personal predisposition and conduct of life will always be important sources of error."

Modern writers in the main agree with his prognosis. White[2] states that "recovery from the single attack is the rule, while the likelihood of subsequent attacks is quite certain. The prognosis for this disease is, therefore, bad as to ultimate recovery, although

good for the separate attacks. Sudden onset, is, on the whole, rather indicative of a sudden recovery, and future attacks may be presumed to follow in general, the course of the past one. As the years go by the attacks are apt to recur with greater frequency, the quiescent periods becoming shorter and shorter. . . . This group of disorders develops in characters which have a manic-depressive coloring, i. e., which shows a tendency to depression and excitement not sufficiently well marked to be called disease."

In Strecker and Ebaugh's[3] book we find the words "It is doubtful if any valid index of prognosis can be taken from the psychic content, though it has been stated that gross somatic and nihilistic delusions are unfavorable."

Henderson and Gillespie[4] tell us that "attacks of excitement of the manic type occurring after the age of 40 years have a graver significance than attacks of depression, and such attacks of excitement are not infrequently followed by a state of chronic mania."

Many have believed that in those cases in which hallucinations are present during a manic-depressive psychosis, the outcome is less likely to be favorable, and the course of the case is likely to be longer. Such a view has been disproved by the figures of Pease (given by Henderson and Gillespie). Pease, in a statistical survey of 800 cases shows that 219 or 27.3 per cent, had hallucinations and of these 55.7 per cent recovered; whereas out of 581 non-hallucinated cases 53.4 per cent recovered. After quoting these figures Henderson and Gillespie conclude their remarks on prognosis by the statement that "an improvement in the bodily health accompanying an abatement of the acute mental symptoms is usually of happy augury."

Heredity has long been regarded as a potent factor. Nearly a century ago, the French observers, Falret père et fils, observed three families in which circular psychoses occurred in the grandmother, mother and daughter. Various writers have studied the influence of heredity, some believed this factor responsible in as high as 70 per cent. Paskind[5] who surveyed hereditary factors in over 700 cases records from the files of a well-known psychiatrist, did not find that a bad heredity seemed to influence the course or severity of the attacks. He considered family history free from

taint, and family history with neuropathic taint including migraine, nervousness, and psychosis. His conclusions in all cases were very similar both in the free and tainted families. In all his cases the median age of onset was about 30 years, the average duration of the attack was about 4 months, and the median time interval between attacks was about 7 years.

Further work by Farr, Schwartz and Smith, and Farr, Sloane and Smith[6] would indicate that the influence of heredity may be doubtful since in their cases a tainted heredity occurred less often in manic-depressive cases than in cases of general paralysis. These authors found however, that tainted heredity occurred more frequently in manic-depressives than in involution melancholics in the ratio of 10 to 6.

Examination of the literature of recent years reveals several valuable statistical articles on the subject of the prognosis of manic-depressive psychosis. Malzberg[7] in a review of 2,000 cases determined that the average duration of a manic attack is 246.8 days; that the age of least resistance to this mental condition is the ten years from 20 to 30; and that the majority of the cases occur between the ages of 20 and 40 years. In his cases, Malzberg also found that most recoveries occur when the attack comes on between the ages of 20 and 24 (43.6 per cent) and that "manic cases selected from the younger group tend on the average to recover in slightly less time than the older cases."

Pollock[8] in a survey of large groups of manic--depressives from data on statistical cards, reported that sex, and type of attack seem to have but little influence on the frequency of recurrence, but like Malzberg he found that age seemed to be a factor, in that patients between 20 and 40 years of age at the time of first admission had fewer recurrences of attacks than patients younger or older. The same study also showed that the average duration of attacks increased irregularly with advancing age. The average duration of attacks of the recovered cases in the series was a little over one year, appreciably longer than Malzberg's average among cases of the manic type of 246.8 days. A hopeful note is found in Dr. Pollock's statement that "although manic-depressive psychoses are usually spoken of as recurrent forms of mental disease, it appears

from these data that in more than half of the cases, there is no recurrence of attack of sufficient severity to cause a readmission to a hospital."

Hinsie[9], Zilboorg and others are attacking the question of treatment and prognosis from the angle of psychoanalytic therapy following recovery from an attack. This method of procedure was begun by Hinsie in 1922 and up to the present time one article has been written by him. It is a distinct advance in psychiatry, but it will take many years' work to collect the necessary data for statistical purposes.

Material Used

The author's investigation is based on the data obtained from the study of the complete case records of 493 patients admitted to the Kings Park State Hospital between January 1, 1920, and December 31, 1928, and diagnosed manic-depressive psychosis. All of them have either been discharged from the hospital as recovered, or are still in the hospital, and in this study, they will be referred to as the "recovered" and the "in-hospital" groups. Data of patients who died in the hospital or were discharged as unimproved, improved, or much improved were not used. All of the patients still in the hospital have been here over three years and most of them over four years, and it is felt that they can therefore, be regarded as chronic and suitable for comparison with those who recovered. Of the total number, there were 398, or 80.73 per cent in the recovered group, and 95, or 19.27 per cent, in the in-hospital group.

Many obstacles were met in obtaining the data for this paper. Chief of these were the inaccuracies and contradictions found between the statistical data sheet, anamnesis, abstracts from other hospitals, mental examination and other sources of information in the record. To make this error as small as possible the author carefully examined the entire record of the patient and weighed each fact before it was accepted and charted. Another source of error was inaccurate Kraepelinian nosology. The author feels however, that this error was not large, as only an occasional record seemed to indicate that that patient might have been better diag-

nosed as an arteriosclerotic, mental-defective, involution or schizophrenic psychosis.

Scheme of Procedure

Each patient was considered from the standpoint of body type, previous personality, heredity, previous attacks, age of first attack, onset, or duration of psychosis before admission, duration of psychosis, and trends; then placed in the proper group, "recovered," or "in-hospital" and a comparison made between these two. Also those in the "recovered" group have received further study. The onset has been correlated with the duration and also with the trends.

Body Type

(Table 1)

In considering the body type of the individual the examiner had at his disposal in the recovered cases, only a passport photograph of the patients, and realizes that this is entirely inadequate information for the scientific study undertaken. However, it has been included as a matter of interest. To make the procedure as simple as possible the pyknic and asthenic types only were considered.

Table 1. Data Relative to 493 Patients with Manic-Depressive Psychoses Admitted to Kings Park State Hospital from January 1, 1920, to December 31, 1928, Who Were Discharged as Recovered (398 Cases) or Remained in the Hospital to the End of the Period (95 Cases)

	Recovered, per cent	Remaining in hospital, per cent
1. Body type		
Pyknic	21.3	26.3
Asthenic	15.0	22.1
Mixed	47.7	51.6
Unknown	16.0	...
2. Personality		
Open	21.0	34.8
Shut-in	30.6	33.7
Normal	40.0	30.5
Unknown	8.4	1.0

	Recovered, per cent	Remaining in hospital, per cent
3. Heredity		
No unfavorable history	36.0	56.8
Immediate family	32.7	26.3
Distant family	10.3	6.4
Unknown	21.0	10.5
4. Previous attacks		
None	51.5	45.3
One	23.0	22.1
Two	10.3	18.0
Three	4.5	7.3
Four	5.0	3.1
Five and over	5.0	4.2
Unknown	0.7	...
5. Age at 1st attack		
10 to 19 years	13.6	10.5
20 to 29 years	36.4	27.4
30 to 39 years	25.0	36.8
40 to 49 years	17.3	15.8
50 years and over	7.7	9.5
6. Onset before admission		
Up to 1 month	43.2	42.1
1 to 3 months	24.6	21.0
4 to 12 months	21.1	22.1
1 year and over	3.0	10.6
Unknown	8.1	4.2
7. Duration of psychosis		
Up to 6 months	20.0	...
6 months to 1 year	22.3	...
1 to 2 years	33.4	...
2 to 3 years	14.0	...
3 years and over	10.3	100.0
8. Trends		
Typical manic or depressive	53.0	33.6
With hallucinations	13.5	8.4
With delusions	17.6	33.6
With hallucinations and delusions	12.9	24.4
Stupor	3.0	...

TABLE 2. TIME OF ONSET PREVIOUS TO ADMISSION OF RECOVERED MANIC-DEPRESSIVE CASES CORRELATED WITH TOTAL DURATION OF PSYCHOSIS, AND TRENDS MANIFESTED BY PATIENTS

Total duration of psychosis	Trends: Typical manic or depresive, per cent	Trends: With delusions and hallucinations, per cent
Onset less than one month before admission (174 cases)		
Up to 1 year	32.8	22.0
1 to 2 years	12.0	17.2
2 years and over	5.9	10.1
Onset from 1 to 3 months (91 cases)		
Up to 1 year	39.5	8.8
1 to 2 years	20.0	12.0
2 years and over	13.2	6.5
Onset from 3 to 6 months (56 cases)		
Up to 1 year	21.4	18.0
1 to 2 years	14.3	18.0
2 years and over	10.3	18.0
Onset from 6 to 12 months (29 cases)		
Up to 1 year	17.2	3.5
1 to 2 years	31.0	17.2
2 years and over	3.5	27.6
Onset over one year (14 cases)		
Up to 1 year	...	...
1 to 2 years	7.1	7.1
2 years and over	14.3	71.5

All others were called mixed. One-fifth of the recovered cases and one-fourth of the patients still in the hospital, are of the pyknic type. One-sixth of the recovered and about one-fifth of those in the hospital are of the asthenic type. The remainder are of the mixed type or are unknown. The small number of pyknic types found may be explained by the fact that in classification only the definite pyknic type, shield type of face, even hairline across forehead, tendency

to low forehead, short thick neck, etc., were used in these percentages. Kretschmer used pyknic and pyknicoid types when he reported that he found 87 per cent in manic-depressive psychosis.

Personality

(Table 1)

The previous personality of the individual has been studied from the standpoint of normal and Hoch's open and shut-in types. It is a curious circumstance that a higher percentage of the recovered cases shows a shut-in, rather than open type of personality. Only one-fifth of the recovered group, while one-third of the in-hospital group were of the open type. One-third of each group were of the shut-in type. Two-fifths of the recovered and one-third of the in-hospital groups were of the normal type. Of the cases still in the hospital, very slightly more, showed an open type of previous personality instead of shut-in, as one might expect. About one-third were described as normal.

Heredity

(Table 1)

Defective heredity is used here to mean only a definite psychosis, epilepsy, excessive alcoholism, or excessive drug addiction, in the immediate or distant family.

In considering the heredity of these individuals it is noted that a little more than one-third of the recovered patients, and more than one-half of those still in the hospital, had no history of defective heredity. About one-third in each group had a history of heredity in the immediate family which has been considered by the author to be the grandfather, grandmother, father, mother, brothers, sisters, sons, daughters, grandsons and granddaughters. All others are considered as distant family. About one-tenth of each group, slightly less in the in-hospital group showed defective heredity of the distant family type. Distant family heredity was considered in these percentages only if there were no defective heredity in the immediate family. See Table 1 for percentages.

Previous Attacks

(Table 1)

In general, previous attacks of the disorder showed approximately the same percentages in the two groups. About one-half had no previous attacks, one-fourth, one previous attack, the remaining one-fourth from 2 to 12 attacks.

Age of the First Attack

(Table 1)

The first attack shows a definite tendency in the recovered group to have its onset in young adult life, one-half occurring before the age of 30; whereas only one-third occurred before the age of 30 in the in-hospital group. However, both groups showed about 63 per cent of first attacks occurring between the ages of 20 and 40 years. When the first attack occurred at 50 years of age or over there is a somewhat larger percentage in the in-hospital group.

Onset Before Admission

(Table 1)

The onset before admission or duration of psychosis prior to admission shows practically the same percentages in the recovered as in the in-hospital group. Nearly one-half had an onset of less than one month, one-fourth of them one to three months, and about one-fifth from 3 months to 1 years. However, the recovered group showed only 3 per cent with an onset over one year, whereas the in-hospital group showed 10. 6 per cent with the same onset.

Duration

(Table 1)

Duration, in this communication includes the total duration of the psychosis from the date of onset given in the case record to the date of recovery at parole, during the parole period, or at discharge. Nearly one-half of the individuals recovered in less than one year, one-third between 1 and 2 years, one-seventh between 2 and 3 years, and one-tenth over 3 years. Of the 95 still in the hospital at the present time all have been here over 3 years to date.

Trends

(Table 1)

The question of trends has been considered in a very broad sense —typical manic or depressive reactions, with typical meaning, no delusions or hallucinations; then individuals with hallucinations only; with delusions only; and with both delusions and hallucinations; and finally with a stuporous reaction. Over one-half the recovered group showed typical manic or depressive reactions, whereas the in-hospital group had only one-third of its patients in the typical class. Patients with hallucinations were about equal in both groups, slightly less in the in-hospital group. The in-hospital group shows double the percentage of the recovered group with delusions only. The same is true of both hallucinations and delusions. Three per cent of the recovered group showed a stuporous reaction, but there was none in the in-hospital group.

Onset Correlated with Duration and Trends

(Table 2)

The onset, or duration of the psychosis prior to admission, has been correlated with the entire duration of the psychosis and the trends. This of course applies only to recovered patients. All patients now considered had an onset less than one month. In this group one-half of the patients were typical manics or depressives, and the other half had hallucinations and, or delusions. The only correlation that can be made is that in this group there is a strong tendency for the typical manics or depressives to recover much more quickly than those with delusions and, or hallucinations. With an onset from 1 to 3 months, nearly three-fourths of the patients were typical manics or depressives, and the tendency was for a more rapid recovery. With an onset from 3 to 6 months slightly more than half had delusions and, or hallucinations. Also in this group the typical manics or depressives had a tendency to recover more quickly. With an onset from 6 to 12 months half were typical manics or depressives, and half had hallucinations and (or) delusions. Here again the tendency was for a much quicker recovery. About 94 per cent of the typical group recovered in less than two

years whereas only 41 per cent in the hallucination and (or) delusion group recovered in the same time. With an onset over 1 year the hallucination and (or) delusion group preponderates in the ratio of 4 to 1.

Conclusion

I will conclude by saying that these observations indicate that an individual would be most likely to recover from his manic-depressive attack if he had a normal previous personality, a clear heredity, no previous attacks, or a previous attack between his 20th and 30th birthdays, and an abrupt onset of a typical manic or depressive reaction with no delusions or hallucinations. The average duration of the psychoses of the recovered group was 1.51 years.

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ORDER OF BIRTH IN MANIC-DEPRESSIVE REACTIONS*

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In an attempt to see if the ordinal position in the family was of any influence in the incidence of manic-depressive psychosis, a study was made of one hundred cases in the St. Lawrence State hospital selected for the reason that their case records contained the necessary information for this purpose.

Adler in his book entitled "What Life Should Mean to You," emphasizes the ordinal position in the family in the development of problem children, neurotics, criminals, drunkards and perverts. He does not offer any statistics but in the January, 1931, number of the American Journal of Psychiatry, Volume 10, Number 4, John Levy in an article entitled "A Quantitative Study of Behavior Problems in Relation to Family Constellation" has statistics based on seven hundred cases of Chicago problem children. Levy found that the first-born was a problem child relatively more frequently than children in any other ordinal position and this finding holds after allowance has been made for the fact that there are more first-born children in the community; that the second-born is a behavior deviate relatively more frequently than children in other ordinal positions only when a small high grade community is studied.

TABLE I. DISTRIBUTION OF THE MANIC-DEPRESSIVE PSYCHOSES GROUPED ACCORDING TO ORDINAL POSITION

Order of birth	Number of cases
1	48
2	15
3	10
4	10
5 (or later)	17
Total	100

Of the one hundred cases (Table I) of manic-depressive psychoses in the St. Lawrence State Hospital, 48 were first-born; 15 second-born; 10 third-born; 10 fourth-born and 17 fifth-born or

*From the records of the St. Lawrence State Hospital, Ogdensburg, New York. Read at the Interhospital Conference of the New York "Up-State" Hospitals at Utica, New York, April 26, 1933.

later. There is a marked preponderance in the number of first-born, namely 48 per cent. If we exclude those cases of only children of which the number is 10, there are still 38 first-born in families of two or more children, and the percentage is still very high, there being 38 cases of first-born out of 90 making a percentage of 42.2. Therefore, it can be said that while the number of cases is small the frequency of development of manic-depressive psychosis according to the ordinal position of the family is relatively higher in the first-born than in any other ordinal position.

TABLE II. ORDINAL POSITION ACCORDING TO SIZE OF FAMILY

Number children in family	Number cases 1st born	Number cases 2nd born	Number cases 3rd born	Number cases last born
1	10	..	..	..
2	14	5	..	5
3	10	4	4	4
4	4	2	1	3
5 (or more)	10	4	5	10
Total	48	15	10	22

Is the size of a family any criterion? There were in this group of first-born (Table II) 10 cases in which the family had only 1 child; 14 cases of 2 children; 10 cases of 3 children; 4 cases of 4 children and 10 cases of 5 or more. While the greatest number of cases of manic-depressive psychosis among the first-born develops in families of 3 children or less, the objection might be raised that the percentage of 48 is only 15 per cent higher than one would expect in any family of three children, namely, that each member of a family when he develops a psychosis would be one in three—therefore 33 1/3 per cent. If this were the case then we should expect that the number of second-born who develop manic-depressive psychosis and the number of third-born who develop manic-depressive psychosis should at least approximate the number of first-born.

There were 15 cases of second-born in this group of one hundred cases divided as follows (Table II): Five in families of 2 children; 4 in families of 3; 2 in families of 4; 4 in families of 5 or more. There were 10 third-born (Table II): Four in families of 3; 1 in families of 4; 5 in families of 5 or more. It is therefore seen that in the first, second and third-born the number of first-

born is relatively higher than the second or third-born. If we limit outselves to families of 3 children, we find that there were 10 first-born; 4 second-born and 4 third-born, making a total of 18 cases. Even then in a family of 3 children manic-depressive psychosis is relatively higher among the first born. There were 10 fourth-born. Three were in families of 4 children; 4 in families of 6 and 3 in families of 7 or more. Of the 17 cases fifth-born or later, 4 were in families of 5 children; 3 in families of 6; 2 in families of 7; 8 in families of 8 or more. This study cannot withstand statistical attack because of the small number of cases under consideration. Nevertheless it would seem that the first-born develops manic-depressive psychosis much more frequently than a member of the family in any other position.

The youngest member of the family has often been considered to maintain a unique position. Twenty-two cases were the youngest in the family, excluding the 10 only children (Table II). Five were in families of 2; 4 in families of 3; 3 in families of 4; 4 in families of 5; 3 in families of 6, and 3 in families of 7 or more.

TABLE III. SIZE OF FAMILY OF THE 100 CASES OF MANIC-DEPRESSIVE PSYCHOSES

Number of children in family	Number of cases
1	10
2	19
3	18
4	10
5	11
6 (or more)	32
Total	100

In this group there were 47 families consisting of 3 children or less, and 53 families consisting of 4 children or more divided as follows (Table III): 10 families with 1 child; 19 with 2 children; 18 with 3 children; 10 with 4 children; 11 with 5 children; 11 with six children; 8 with 7 children; 5 with 8 children; 1 with 9 children; 3 with 10 children, and 1 each with 11, 12, 13 and 21—so the average American family consisting of three children can not be used as a comparison with this group.

Is it possible to make an explanation of this preponderance

among the first-born? Is it perhaps a fact that the first-born in passing through a primiparous birth canal is subjected to more head trauma than those who come later? This would make an interesting study if it were considered on the basis of the number of dry births, head presentations, breech presentations, those born by Caesarean section, etc.

There are many factors occurring in early life which may cause an arrest or fixation of the libido at any particular point in the psycho-sexual development. In this group of cases amongst the first-born there was one situation which was rather frequent. Every first child in a family has been for a time at least an only child and generally as a result was pampered and by virtue of being an only child enjoyed the privileges of a little Oedipus. Led to believe that all the attention, interest and affection of the family had been reserved exclusively for him, suddenly, without any warning, he finds the kingdom, over which he has reigned supreme, demolished by the arrival of a younger member. In many of these cases there has been a marked feeling of being neglected, unwanted, cast aside with a definite feeling of insufficiency and depression. Frequently it has been felt that the individual has his first attack of manic-depressive reaction at this time and that subsequent attacks are repetitions of this situation. Often as we examine histories of people who are under treatment, we find that there have been frequent attacks of depression beginning early in life and which were noticed by members of the family because we find such statements that as a child he had to be removed from school because of "nervousness;" because of being "sickly" or because the work was too difficult. Many times these incidents can be explained on a physical basis. However, it should be borne in mind that these incidents may be forerunners of later frank attacks of manic-depressive psychoses. There are such statements as that as a child the patient had been sensitive, lazy and deceptive. In one case the patient stated that she had the feeling of being unwanted and, therefore, could not meet competition. She was always ambitious but felt there was no use trying to make a success of herself because her sister received the praise and encouragement at home and she had to occupy a secondary place. This ambition with the hopelessness re-

sulted in what was termed "laziness." She later found that by expressing her ambitions she could win more praise than by the expenditure of energy. In her trend she identified herself with Saint Therese and said she was to be the wife of Christ. Adjustment in school was somewhat difficult as she was spoiled as a child. This is the statement in the anamnesis; also that her health had not been good. The patient stated as a child she was spoiled; that when two years of age she remembers distinctly the birth of her younger sister; she could also recall the "all gone" feeling she experienced at the time. She was pampered, very dependent and stated "Sister Mary was always pushed ahead and I was placed in the shade," and "My sister is and always has been attractive." The psychosis was characterized by a definite feeling of insufficiency, difficulty in thinking, retardation, depression, hopelessness and attempts at self-destruction. Another patient is described as annoying her younger sister constantly during her early life. She expressed a marked feeling of insufficiency, was depressed and retarded, had a hopeless attitude with a fear of insanity; stated she had always been making sacrifices for her younger sister; resented very much the arrival of this younger member in the family. She had the feeling that she was displaced at the birth of her sister; that her parents did not want her any longer. The psychosis began when the sister was to undergo an operation. How much imagination does it require to compare the conduct of a man 52 years of age in a manic excitement who when the police of the city in which he lived changed the style of their uniforms began to call them tin soldiers, and in other ways ridiculed them and finally invited them to come to his hotel room to shoot it out with him, to the conduct of this individual when he was three years of age and his brother was born. He felt he had been displaced and in reaction to the situation became boastful, egotistical and domineering. He said that while he was carrying this bullying attitude he always felt inferior to the other fellow.

No attempt is here being made to advocate any new psychology in the development of manic-depressive psychosis, nor is it claimed that all cases of manic-depressive psychosis can be traced to such a situation, but frequently in child guidance work this order of birth

in the family has been found to be the keynote to the difficulties. If we look upon these early problems as minor attacks of manic-depressive reactions and treat them as such we shall then understand better such satements as "he has been nervous all his life." We shall avoid such situations as "he had to be removed from school because he was 'sickly' and the effect of his being 'sickly' will not cause him to lead such a life that he will be prone to more serious attacks of manic-depressive psychosis because he will feel that his sickness is understood, and he will be receiving the proper treatment. Although we may not avert frank attacks of psychoses, at least we may be able to lessen the intensity and severity of future attacks, and we shall have a better understanding of the psychological factors involved.

Summarizing we find the following:

1. That out of one hundred cases of manic-depressive psychoses 48 were found to be among the first-born.

2. Twenty-two cases were among those last born in the family.

3. The reaction to the birth of a younger member in a family frequently appears to be a predisposing factor.

4. Early childhood disorders should be treated as manic-depressive reactions in the hope of averting frank attacks of psychosis in later life.

MANIC-DEPRESSIVE "EXHAUSTION" DEATHS*

An Analysis of "Exhaustion" Case Histories

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Brooklyn State Hospital is almost unique in its status as an admitting hospital for the physically enfeebled, the violently disturbed, and the acutely-ill mental patient. Its geographical position, across the street from the Kings County Hospital psychopathic wards, humanely permits the transfer of the most difficult clinical types in the manic-depressive group, and in other groups that might otherwise go to the Kings Park State Hospital that shares our district. Furthermore, physically-well cases that have a protracted mental course are promptly transferred to the Creedmoor Division. This is reflected not alone in the high death rate in the manic-depressive group, but also by the cause of death. It will be necessary to take this fact into consideration when our quoted figures are matched against the experience of other hospitals. As we know, there is in this group no characteristic cause of death any more than there is a demonstrable specific brain pathology. And it is well accepted that the manic-depressive patient reacts usually with relative efficiency to the infection stress of his environment. A high percentage of deaths from acute infections has been reported, ranging from 22 to 40 per cent. Valvular heart disease ranks a close second, and particularly does the manic patient suffer from this. Circulatory disasters and cancer are relatively high and tuberculosis relatively infrequent.

One does not find in the literature much in reference to exhaustion as a cause of death. The underlying reason for such infrequent references may be that few deaths from exhaustion occur at other hospitals, or there is a propensity to diagnose acute cardiac dilatation and, mayhap, more accurately.

In the 20 fiscal years, 1912-1932, there were admitted to Brooklyn State Hospital 4,341 patients that were placed in the manic-depressive group. This represents 21 per cent of all admissions, and by five-year periods, this percentage did not vary 2 per cent.

*Read before the Interhospital Conference at the Psychiatric Institute at New York, April 19, 1933.

During this time there were 980 deaths of manic-depressive patients or 22.5 per cent of all admissions of this group. In five-year periods this percentage does not vary 3 per cent.

The deaths from "exhaustion" average 45.3 per cent of all deaths and was in excess of the nearest listing, cardiac, by 20 per cent. By five-year periods the percentage of deaths from exhaustion showed notable variations: namely, 51, 55, 67, and, during the recent 5 years, 40.

The table that follows shows the assigned cause of death taken from the yearly reports together with the chief pathologic finding in the 64 cases autopsied for the 5-year period 1927-1932 inclusive.

CAUSES OF DEATH OF MANIC-DEPRESSIVE PATIENTS, BROOKLYN STATE HOSPITAL 1927-32

	Deaths		Autopsies	
	Number	Per cent	Number	Per cent
Exhaustion from acute mental disease	154	40.0	12	23.0
Cardiac	120	31.0	4	7.6
Chronic myocarditis	105			
Chronic endocarditis	15			
Pulmonary	52	31.0	5	9.6
Lobar pneumonia	23			
Bronchopneumonia	29			
Nephritis, chronic	22	5.7	3	5.7
Arterial	7	1.8	2	3.8
General arteriosclerosis	5			
Cerebral hemorrhage	2			
Acute infection	7	1.8	12	23.0
Surgical	3		7	
Septicemia; pyemia	1		2	
Empyemia	1		1	
Genito-urinary	0		2	
Erysipelas; agranulocytosis	2			
Tuberculosis	9	2.3	1	2.0
Carcinoma	7	1.8	6	11.5
Pernicious anemia	1	0.3		
Diabetes (thyrotoxicosis)	1	0.3	1	2.0
Suicide	5	1.3	4	7.6
Other	*1	0.3	**2	3.8
Total	386		64	

*Accidental. **1 gastric ulcer, 1 fracture of skull.

On analysis of these assigned causes of death, we find that the percentages of cardiac and pulmonary deaths rank equally at 31 per cent, and that the percentage of "exhaustion" deaths is 9 per

cent relatively higher, or 40 per cent. Chronic nephritis occupies a low mid-point at nearly 6 per cent. The arterial causes of death, the acute infections, and carcinoma are singularly equal at 1.8 per cent. Tuberculous deaths (2.3 per cent) and suicidal causes of death (1.3 per cent) account for the major part of the remainder.

The percentage of autopsies occurring in this group is unfortunately small, and is inadequate for conclusive reference. The "exhaustion" percentage is high, however, in the pathologic listing and ranks equally with the deaths from acute infections. The high percentage of autopsies in carcinoma deaths suggests only that the autopsy permission is more readily secured in these cases.

In the conduct of a mental hospital from the standpoint of clinical medicine, such a number of deaths occurring from a condition that presumably should not result in death with proper prophylaxis, observation and treatment, calls for criticism and study. These cases have been individually studied and treated, the percentage of deaths has fallen, but the rate still appears high. In the hope that some new light might appear, a statistical study of case histories was made of all deaths over a recent five-year period, July 1927 to 1932, with particular attention where exhaustion or excitement was noted on the death certificate. This was the assigned cause of death in 282 cases of various mental groups. Fifty-two variations of "exhaustion" were used, ranging from merely "exhaustion" to "acute exacerbation of mental symptoms and refusal of food." Parenthetically, the adjectives qualifying exhaustion were quite extensive, such as acute, violent, intense, constant, continuous, long-continued, and others. In addition, there were 36 varities of myocardial difficulties attached to exhaustion. These ranged through the myocardial failures and insufficiencies, from "acute heart failure from excitement with exhaustion" to "congestive heart failure brought on by heat exhaustion."

We confine our notes in this paper, however, to "exhaustion" occurring in diagnosed manic-depressive cases. There were 187 death certificates during this period carrying the term "exhaustion" in relation to manic-depressive psychoses, and they were distributed as follows.*

*The discrepancy in number of "exhaustion" cases as discovered in case histories and as taken from fiscal reports appears due to classifying a cause of death such as "bronchopneumonia and exhaustion" under a pulmonary heading and, also, "chronic myocarditis with acute exhaustion" under a cardiac listing, as well as to altered reports due to autopsy findings.

DEATHS FROM EXHAUSTION OF MANIC-DEPRESSIVE PATIENTS

Fiscal year ending	Manic-depressive admissions	Manic-depressive deaths	Deaths from Exhaustion			Per cent of admissions	Per cent of of deaths
			Male	Female	Total		
1928	301	86	4	49	53	17.6	61
1929	291	59	3	35	38	12.3	64
1930	349	73	2	27	29	8.3	40
1931	342	77	2	29	31	9.0	40
1932	332	91	1	35	36	10.8	39
			12	175	187		

As the cases were reviewed it became evident that many should have been otherwise designated on the death certificate. These fell into two classes: (1) Those in which there were indisputable reasons for a more specific cause of death; and (2) Those in which there was grave doubt and much evidence against a diagnosis of exhaustion but also because of insufficient investigation, absolute proof was lacking.

In the first class there were 11 cases in which another diagnosis should have been used. In this group are 8 of the 20 autopsies performed, although the certificates bore "exhaustion" as the clinical diagnosis. The second class of cases excluded is approximately the same, but with less complete evidence of another diagnosis. There were 28 of these cases. The standard for rejection in this grade may be estimated from the following abstracts.

No. 35481. Age 32, "Exhaustion and refusal of food." Previously well, returned by taxi from a "shopping trip" and was so confused that driver took her to police, but she found her way home later. Poor history, but had three children living and well, youngest aged three. At admitting hospital was turbulent, in restraint. Negative physical. At Brooklyn State Hospital colostrum expressed, enlarged inguinal glands, enlarged uterus, tenderness and pain in left lower quadrant; nurses' notes state: "eating well until last day when tube-fed once;" she was anemic, "menstruating" with foul odor. On the fourth day she became suddenly weak, T. P. R. were then 102, 100, 24, and she died the next morning. Mental diagnosis: manic depressive—manic type. Suggested cause of death: septic abortion.

No. 35309. Age 55. "Exhaustion from acute mental disease." Following information that she had inoperable pelvic carcinoma six months previously, she became depressed, hopeless, slept poorly. At admitting hospital she was agitated, depressed. At Brooklyn State Hospital, she was quiet, pale, emaciated, complained of back pain and had diarrhoea. T. P. R. normal first two days, rising to 101, 110, 22 at death which occurred several hours following a severe convulsion from which she did not regain consciousness. Mental diagnosis: manic-depressive, mixed type. Suggested cause of death; carcinomatosis.

Such cases are not exhaustion from acute mental disease, and should be assigned their proper place. The errors appear careless, but there are extenuating factors. The resistive, violently disturbed and assaultive patient cannot be examined properly, laboratory examinations are incompatible with accuracy, essential data are not secured from relatives or from the hospital of previous residence until after issuance of the certificate.

Without discussing the accuracy of any individual case history, the 148 remaining cases selected are those of typical exhaustion and excitement, and have histories upon which we may fairly accurately base conclusions. Eighty-two, (55 per cent) may be considered early or acute cases, having less than a week's residence, although we have not considered them separately. There were 9 men and 139 women.

The types of reaction of the cases selected are as follows:

Manic type	99
Mixed type	36
Depressed type	6
Agitated depressed	3
Stupor	3
Perplexity	1
	148

It is frequently stated that the heat of the summer months is a marked factor in exhaustion cases; and among our death certificates, heat is specifically mentioned three times. If the percentage of deaths to admissions are graphed by months we find that from

June to August is a sustained peak only slightly in excess of a high peak in December and a sustained rise through February to March. It is to be noted that there is only a slightly increased number of deaths during the warm months, but the increase is not sufficiently marked to attribute it to seasonal temperature alone.

The age groups are of some interest. There was one woman, 63; the youngest was 17. The men ranged from 17 years of age to one of 60.

The number of deaths graphed in five-year age intervals maintains an almost constant level at 23 until the 35th year period when it gradually falls to a sharp drop at the 50th year group. This is at variance with the 134 cases of "exhaustion" among the other psychoses during the fiscal period. In this case a similar graph gives us a curve rising sharply to a peak at the 45th year period and a sharp and prolonged fall during the following age divisions:

AGE AT DEATH OF PATIENTS DYING FROM EXHAUSTION

Age at death, years	Manic-depressive psychoses	Other psychoses
17-20	19	4
21-25	22	7
26-30	23	10
31-35	23	18
36-40	17	24
41-45	16	31
46-50	15	23
51-55	9	5
56-60	3	7
61-66	1	3
66-75	0	2

The outstanding anamnestic feature is loss of sleep and lack of food with the onset of acute symptoms. Statistically expressed: 50, or 33 per cent, lost sleep; 43, or 30 per cent, refused to eat or ate poorly; 22, or 15 per cent, both ate and slept poorly. No figures approaching these are found in studying other types of deaths.

At the admitting hospital or elsewhere, 17 were tube-fed, 2 spoon-fed, 1 required rectal feeding, and another required a special diet fed through a gastrotomy tube. In other words, more than a third of this series did not receive proper nourishment for more or less extensive periods before admission to Brooklyn State Hospital.

Another feature is the number with onset occurring in the post-partum period. Here we have 16 cases, 11 per cent, that average 15 days interval between delivery and psychopathic ward admission. In one case only is there a history of fever coincident with psychotic behavior. In addition to these cases, two were nursing children at the time of onset.

Headache is a common enough symptom, according to relatives, but there are only 6 cases in which this is noted.

Influenza appears 6 times and lobar pneumonia once, either with the onset or immediately preceding.

We also note 4 cases—all females—who were actively reducing, two taking thyroid and another daily epsom salts and active dietary reduction. There were 6 additional cases in which loss of weight is mentioned, but this occurred during active symptoms of the psychosis.

Four were being treated for anemia; two had the manic outburst post-operatively, both gangrenous appendicitis; 10 cases had attempted suicide but, with the exception of two fracture cases, the injuries were not important.

Slightly more than half were admitted as stretcher cases; 11 were admitted in a critical or moribund state, and over 15 died within 48 hours from the time of admission.

Considerable study was made as to the interval between leaving home and reaching the State hospital. We had the impression that the longer the interval the shorter the duration of life on our wards, but our study did not confirm this. Seven cases, (5 per cent) were at other institutions for varying periods of time before entering the committing hospital, but all these lived ten days or longer with us. As a matter of fact there is some evidence to show that the longer the acute symptoms are present before commitment the longer the patient remains alive at the State hospital.

This, of course, is quite contrary to expectation. There are no control figures that might show that there is a shorter stay at the committing hospital in recovered cases. The only conclusion appears to be that the degree of acuteness and the nature of the morbid process determine the relative length of life rather than that prolonged observation contributes to the early mortality.

DURATION OF ILLNESS OF PATIENTS WHO DIED FROM EXHAUSTION

Brooklyn State Hospital residence	Number of patients	Average days acutely ill at home	Average days at Psychopathic Hospital	Total average days acutely ill before admission	Average days at Brooklyn State Hospital	Average duration of acute illness, days
1st day	6	6.4	5.3	11.7	1	12.7
2nd day	9	10	6.9	16.9	2	18.9
3rd day	16	7.3	6.4	13.7	3	16.7
4th day	15	6.8	4.1	10.9	4	14.9
5th day	13	6.2	5.1	11.3	5	16.3
6th day	10	8.7	7.2	15.9	6	21.9
7th day	13	6.5	6.3	12.8	7	19.8
1st week	82	7.4	5.9	13.3	4	17.3
2nd week	34	7.4	5.7	13.1	10.4	23.5
3rd week	8	9	7.6	16.6	16.4	33
4th week	6	10.5	7	17.5	25.1	42.6
1-3 mo.	8	16	8.3	24.3	1.5 mo.	2.3 mo.
3-6 mo.	5					
6 mo.-1 yr.	2					
1 yr-5½ yrs.	3					

Thirty-seven cases, however, were admitted with "exhaustion" or "weak and exhausted" on arrival. In admission notes we also find "dehydrated," "lips cracked and bleeding," and " skin and mucous membranes dry," appearing 46 times. "Emaciated" appears 12 times; "stupor" 3 times. These are not specific but mean much, in relation to prognosis, though they are vague clinical terms.

A third of the cases were admitted with cardiac symptoms. This is specific. These ranged from notably reduced blood pressure (14) to extra-systoles with dropped beats.

Pulmonary signs on admission were less frequent: 6 cases with rales; 1 case with "congestion at the bases," 3 are noted as cyanotic or with dusky lips; and in 2 there is shallow breathing.

In 88 cases the mouth is noted as foul, with sordes, tongue dry and furred. Bad condition of the teeth is also a common note. But the cases received, no matter whether they live or die, or what the diagnosis may be, run about this percentage (60 per cent) of foul mouths, so no particular importance can be attached to the high number. In more than thirty of these cases, a routine examination made for Vincent's infection was negative.

The admission temperature and pulse are a good indication of the early condition of the patient. Of this series, 45 per cent (67)

entered with a pulse rate above normal, and 35 per cent (51) entered with an elevated temperature. It is true that many enter with a pulse acceleration due to excitement, and possibly may have a slight increase in temperature. If the pulse or temperature did not continue high they were considered normal.

Pulse rate	Cases	Temperature	Cases
90-99	16	99.-99.8	29
100-109	20	100-100.8	30
110-119	22	101-101.8	16
120 and over	25	102 and above	5
Below 60	2	Subnormal	2

The temperature course preceding death is practically always intermittent, notably septic or toxic in character. In most cases the base line is a slight elevation with peaks 2-3 degrees higher, then the final rise at death to extreme points. In the few cases under treatment sufficiently long for reliable observation, it was observed that hypodermoclysis and intravenous infusions controlled the temperature almost immediately.

Relative figures concerning the temperature course are open to too much argument for critical analysis. Cases dying the first few days of residence may have had elevation for several days preceding entry; and this is known in at least 6 cases. Cases are discovered with temperatures after a normal running chart has been discontinued, and others are actually too violent for proper recording.

As far as might be ascertained unfavorable symptoms appear in the following order: an exhausted, fatigued or "toxic" facies, dehydration, septic temperature course, stupor or dullness, a falling blood pressure with increasing pulse rate, and a terminal circulatory failure.

As to the contributory effect of therapy, we have mentioned the rapid and excellent response to hypodermoclyses. The greater percentage of these cases appear septic or toxic, and are dehydrated. Less than a third, (32) had the benefit of subcutaneous or intravenous saline or glucose. Only 11 had Murphy drip. It must be said, however, that forced fluids were always ordered, but that does not appear sufficient.

Particularly are fluids by mouth insufficient when 56 (38 per cent) required tube-feeding, two cases rectal feeding and three spoon-feeding. In addition it is noted that 16 others either "ate poorly" or "took insufficient nourishment."

The second important item is the attempt to secure rest. We draw three conclusions from our records along this line. First, that there is no evidence of any narcotic or hypnotic contributing to death. Second: that an extensive list of such drugs has been utilized, and in some cases over a long period of time. Third: that records are woefully incomplete in failing to mention the effect of such drugs.

In the attempt to produce rest, protection sheets, tepid packs and continuous baths have also been used, and mostly in combination. Protection sheets show no effect contributory to death positively or negatively. Seventy-two cases were treated by pack, continuous bath, or both. Without control cases, it is hard to determine just how much good this may have done. In a number of instances it appears to have done considerable harm.

In this series we have records of 14 treated in the tubs. Of these, 7 died in less than 12 hours after removal. "Sudden collapse in tubs and death two hours later," "removed from tub on day of death with sudden temperature of 104°;" "sudden cyanosis, removed from tub but died shortly after;" "patient failed suddenly and died last night," but the hydrotherapy sheet shows five hours in bath the previous afternoon. With the large numbers of continuous bath patients outside of this series showing no such malign reaction, this deserves particular attention.

Of the 58 cases treated by pack, 14 were in pack during the last 24 hours of life; 6 were removed just previous to death, and one was found dead shortly after removal. One case spent 47 hours in pack during the 90 hours with us. Another spent 47 hours of her first 48 in pack, and died the following day. Another, 48 hours of the first 68 and died 8 hours after removal because of weakness. One more, in pack 40 hours of the first 48, on the next day had 5 hours of continued bath, and died the following day.

The laboratory findings during the acute phases coincided with the picture of toxemia. Nothing specific was noted in this series as a whole.

Sixty-two per cent evidenced albuminuria and almost a third showed cylindruria as well. The earlier cases of the series had only one specimen submitted, as a rule, and practically all were routine specimen examinations.

Several years ago we attempted to demonstrate acetonuria in these cases. In 3,000 consecutive urinalyses numerous "exhaustion" cases showed relatively negative results compared with non-diabetic acetonuria found in other cases.

Blood counts showed, with two exceptions, an elevation of white cells from 15,200 to 32,000 and a polymorphonuclear response of 79 to 91 per cent. In two cases, both post-partum, a marked secondary anemia was present. A lessened hemoglobin and a red cell count averaging 3,600,000 were the usual findings.

Routine blood chemistry examinations demonstrated no marked feature. The urea nitrogen was always slightly elevated, averaging 22 mgm. per 100 c.c., with a single case at 55 mgm. per 100 c.c. excepted. Creatinin showed no elevation. The blood sugar findings showed such variable findings, and with fluctuations as high as 165 mgm. per 100 c.c., that special note must be made. Following intravenous or subdermal saline, bicarbonate, or glucose solution administration, the blood reducing substances are frequently raised. In those cases not receiving clyses, the blood sugar was found to be within normal limits.

Twenty cases of this series of 187 patients were autopsied. In 8 cases the chief pathologic diagnosis was at complete variance with the clinical one of exhaustion. These were rejected as "exhaustion" deaths and are listed for completeness.

(1) Lobar pneumonia—gray hepatization, pleuritis, subacute nephritis.
(2) Appendiceal abscess with gangrene of cecum.
(3) Acute hemorrhagic pancreatitis with fat necrosis.
(4) Thyrotoxicosis with subacute nephritis.
(5) Acute pyelitis and nephritis with nephrolithiasis and cystitis.
(6) Gangrenous nephritis, metastatic abscesses.
(7) Acute vegetative endocarditis; ruptured splenic abscess; sub-phrenic abscess.
(8) Fracture of skull; extradural hemorrhage.

In addition, a number of cases came to autopsy that undoubtedly would have been diagnosed "exhaustion from acute mental disease" had not the anatomical diagnosis been made before the death certificate was issued. It is also to be noted that in a few instances the findings justified a change in the mental diagnosis to a somatic or a neurological mental grouping.

The remaining 12 autopsied cases revealed slight anatomical findings to account for the termination, and were considered "exhaustion" deaths. Only 5 were completely autopsied. Furthermore, histological examination was only confined to routinely removed sections from the brain, heart, liver and kidneys, plus grossly suspicious or morbid material; and staining was limited to hematoxylin-eosin.

The major anatomical evidence of note in these 12 cases includes a subacute diffuse nephritis (in the sense of "under-acute" rather than "prolonged-acute"), dehydrated tissues, markedly diminished gastro-intestinal content, and acute cardiac dilatation.

The anatomical evidence as examined in a clinical laboratory admittedly leaves much to be desired from a research standpoint. These findings, however, represent terminal landmarks of morbid anatomy only and do not permit an outstanding pathologic diagnosis. The picture of exhaustion at autopsy is: (1) absence of positive findings which it is admitted may be missed (foci in the brain or cord, or small foci not observed elsewhere); (2) an expression of a terminal toxic condition represented by a subacute nephritic reaction grossly and microscopically, general dehydration and evidence of insufficient feeding; and (3) a dilated heart with thinned walls which is an expression of the manner of death.

Summary

Of the 386 deaths of manic-depressive patients during the last five years at Brooklyn State Hospital, 48 per cent were found as occurring with accompanying exhaustion and excitement. An analysis of this fraction, representing 187 deaths, shows that over 20 per cent may be rejected as misdiagnosed. The remaining 148 histories were investigated for relative findings that might contribute to an understanding of the large number of "exhaustion" deaths.

There was a ratio of 3 to 1 of manic to mixed type with a scattered few in the other types.

One-fifteenth of the number were male deaths.

The ages at death were evenly distributed up to the 35-year level which covered 60 per cent of the cases; 90 per cent died before the fifth decade of life.

Practically the same percentage of patients of this group died in winter as in summer months.

A history of improper nourishment and loss of sleep occurs in more than a third of the cases. Also, contributory to a physical exhaustion preceding admission is childbirth (12 per cent), febrile disease as influenza, pneumonia, gangrenous appendicitis (6 per cent), and severe methods aimed at weight reduction, (3 per cent).

One hundred and sixteen, or almost 80 per cent, died within two weeks of admission, and 10 per cent within the first 48 hours. The average stay at the committing hospital influencing the gravity of the outcome could not be demonstrated.

If a typical case of exhaustion may be analytically demonstrated, we have one entering notably dehydrated, fatigued, but acutely disturbed, with increased pulse rate, and frequently with some degree of temperature elevation. There is frequently a reduced blood pressure and other signs of cardiovascular disturbance rather than pulmonary involvement. The temperature continues elevated and pursues an outstandingly intermittent and septic course and the pulse rate is markedly rapid. If not present previously, the fatigue deepens to exhaustion, and circulatory collapse develops extremely suddenly. The patient may react to stimulants and appear in good cardiac condition only to die suddenly in a following circulatory catastrophe. Vomiting, diarrhea, gastric and rectal hemorrhage indicate a most unfavorable prognosis; and there is usually a terminal rise of temperature.

Prolonged treatment in tepid pack and injudicious use of continuous bath are contributory causes of death. Improper nourishment and failure to utilize subdermal infusions early and in all cases, also promotes a fatal termination.

Clinical laboratory results coincide with a picture of toxemia and show no outstanding features. Autopsy material was obtained in

only 20 of the deaths from exhaustion; but 8 of these showed marked infectious and toxic evidence for the clinical picture. In a number of cases autopsied and not listed in this group the findings not only rejected an exhaustion diagnosis but also changed the mental diagnosis.

In 8 per cent of the autopsied series, anatomical findings were lacking to account for death on an infectious basis. The morbid anatomy present in this group was an expression of toxemia and terminal acute cardiac dilatation.

Conclusions

1. The death rate in the manic-depressive group at a reception hospital for acute cases is high.

2. The largest number of the deaths (40 per cent) of manic-depressive patients appeared clinically due to exhaustion and excitement of acute mental disease.

3. On analysis many of these "exhaustion" cases appeared to be insufficiently studied clinically and pathologically, and to have actually died of somatic disease.

The remaining cases show an interesting clinical entity related to septicemia or toxemia that require particular care and observation both for diagnosis and life-saving treatment.

4. A properly controlled clinical investigation of these cases, and a research study of autopsy material will, we hope, aid in reducing the number of deaths now occurring in a potentially recovable psychosis.

HEREDITARY AND ENVIRONMENTAL FACTORS IN THE CAUSATION OF DEMENTIA PRAECOX AND MANIC-DEPRESSIVE PSYCHOSES

BY HORATIO M. POLLOCK, BENJAMIN MALZBERG AND RAYMOND G. FULLER

INTRODUCTION

Review of Studies of the Inheritance of Mental Disease

This study is one of a series emanating from a program of research undertaken jointly, in 1928, by the New York State Department of Mental Hygiene and the State Charities Aid Association, with the financial assistance of the Laura Spelman Rockefeller Fund.

Three years were spent in collecting and analyzing data relating to the prevalence of mental disease in the State of New York. One part of the program dealt especially with the pre-hospital history of patients with dementia præcox and manic-depressive psychoses. It was believed that an intensive study of the family history, personal history and environment of the patients up to the time of onset of the mental disorder might reveal causative factors and thus be of service in applying preventive measures. Experienced social workers were employed to visit the homes of patients and to obtain information from relatives, friends and acquaintances. The cases investigated included first admissions with dementia præcox and manic-depressive psychoses admitted to the Utica State Hospital in the three years 1928, 1929 and 1930. Details concerning the scope of the study and the schedule used will be given in a later chapter along with analysis of the data collected.

As hereditary factors required consideration at the outset, the authors deemed it essential to review the literature pertaining to the inheritance of mental disease before a detailed study of the assembled data was made. Accordingly, there is submitted herewith a brief resumé and criticism of some of the principal studies of the inheritance of mental disease.

Inheritance of Mental Characters

The well-known evidence of the inheritance of physical characters has stimulated interest in the problems of the inheritance of

mental characters. In a general way such inheritance has been long imagined as is attested by the prevalence of certain types of folk-sayings. But such superficial observations were of no value for scientific demonstration, and seemed to run counter to the theories and practice of education. Experiment in the study of human families is almost impossible. Mental development is complicated and subject to great variations. The task of tracing the origin of mental characters, therefore, is beset with difficulties not found in the study of physical characters.

The first step in the demonstration of the inheritance of mental characters is the measure of the resemblance of parents and offspring, or between siblings, with respect to mental traits. In his classic study on "The Inheritance of Mental and Moral Characters in Man"[1] Karl Pearson showed that such characters as vivacity, assertiveness, conscientiousness and temper are as highly correlated in siblings as are physical characters, such as head length, breadth, height, cephalic index, color of eye, or color and texture of hair. To Pearson the fact that such varied mental and physical characters all showed like degrees of correlation, seemed compelling proof that the resemblance was due to one and the same cause, namely, heredity. The association in the case of the mental factors might have resulted, however, from common environmental factors. Imitation, conscious or unconscious, or deliberate teaching, might conceivably result in a similarity in certain mental traits or habits of thought on the part of brothers and sisters. In studying the origin of mental characters we record the totality of our observations, and by statistical devices, such as correlation analysis, we attempt to separate the environmental from the hereditary forces. We seek to measure the degree of similarity of fraternities, for example, when environmental differences have been eliminated. Were it possible to find adequate measures of the important environmental influences, we could dispose of them statistically one by one, and by a process of logical exclusion, determine to what degree mental traits result from hereditary and environmental influences, respectively. Several important attempts have been made in such a direction, notably the studies of Freeman, Holzinger, et al,[2] and of Burks[3]. Unfortunately, even with the aid of refined

tools of analysis, it has not yet been possible to arrive at clear-cut conclusions, for these investigators report contradictory results. Consequently there remains much surmise in this field, and controversy is still rife as to the exact degree of influence to be attributed to heredity and environment. Nevertheless there are few who will deny that heredity does play some generalized rôle in the transmission of mental characters, and the extensive bibliographies[4] on the subject attest the continued interest in this important theme.

From the study of normal physical and mental characters, it was but a step to the investigation of disease. Here we deal with problems of more than mere academic interest. Galton and Pearson were well aware of the importance of this subject from the eugenic point of view, and the Treasury of Human Inheritance and many other compilations are replete with illustrations of the appearance of a great variety of diseases in family stocks. Mental deficiency, epilepsy and mental disease, we are told, do not arise de novo in each generation, but are transmitted from parent to child, because these conditions lie inherent in the family stock or germ plasm.

There is little or no agreement as to the method of transmission of these conditions, but with respect to mental deficiency, at least, there is almost complete unanimity of opinion concerning the general fact of its transmission by inheritance. No one doubts that cases of mental defect may and do arise as a result of disease or birth injuries. But the opinion prevails that in the majority of cases mental deficiency is inherited. In the case of mental disease, however, there is great diversity of opinion. In Germany and in the United States influential groups have arisen which lay great stress on the hereditary factor. Ernst Rüdin and his students in Munich have worked diligently in this field, as have Rosanoff and others in the United States, and they have brought forth presumptive evidence of the importance of heredity in mental disease. It should be stated, however, that psychiatric opinion, which has often fluctuated between environmental and hereditary viewpoints, seems at present to favor the former. It is pointed out that many mental diseases are the result of infections, as general paralysis; or they are consequences of traumas or of degenerative processes which are the accompaniment of old age and to which all are liable, irre-

spective of individual inheritance, provided a sufficiently old age is attained. Even in the case of so-called functional psychoses, such as the manic-depressive psychoses, or dementia præcox, psychiatrists seek for environmental causes such as the daily trials and experiences of the individual. Current psychiatric practice, especially that of social psychiatry tends towards the stressing of psychogenic factors. The rise of the psychoanalytic school with its strictly psychological and social interpretations of the processes of mental disease also strengthens the environmental approach to the origin of mental disease. The social psychiatrist sees causative agents in such situations as friction in the family, financial worries, disappointments in love, or other severe emotional shocks. Others, however, see in these situations mere concomitant events. Thus Dr. White writes "In ascribing these causes, what has been done is simply this: The particular set of conditions which happened to maintain at the time the patient was attacked with a psychosis have been tabulated as the cause of that attack. While they may have had to do with the outbreak of the attack and thus operated as exciting causes, the much more important condition was the unstable make-up of the individual that made it possible for such events to act as causes at all"[5]

Dr. May also writes to the same effect: " . . . The immediate cause, so-called, is usually a mere incident often not without some significance, but bearing little if any definite relation to the fundamental underlying condition responsible for a mental breakdown . . . In the constitutionally predisposed, the love affair, the loss of a position, the upsetting factor, whatever it may be, is merely the straw that breaks the camel's back, and is nothing more than an accident of fate, a pure coincidence. Any other comparatively trivial occurrence, out of the ordinary, any difficult situation which the make-up of the individual could not adequately meet and react to, would have accomplished the same result."[6]

Strictly speaking a constitutional predisposition such as that implied by Dr. White or Dr. May is not synonymous with a hereditary condition, for the latter derives from the germ plasm, whereas the former may be due to developmental defects of pre-natal or early post-natal origin. In practice, however, the constitutional condition

is almost always deemed to arise from a germinal predisposition, so that from this point of view, the origin of a mental disease would be ascribed to hereditary influences. The opposite point of view is presented forcefully by Myerson, who writes: "I suspect an inferiority complex in the ready use of heredity as explanatory of many conditions—because they do not respond to our present medical treatment we throw off the feeling of inferiority that their existence forces on us and take refuge in heredity as a cause, since no one can rationally expect us to eliminate heredity."[7] And again he writes: "The insane have normal descendants, normal folk have insane descendants in a perfectly bewildering and inexplicable fashion. When all the facts are gathered in an impartial manner this is the one phenomenon that stands out."[8]

There was little of what we may call scientific study of the part played by heredity and family stock in the causation of mental disease before the middle of the 19th century. Among ancient peoples mental disease was a relatively infrequent phenomenon, largely because of the rigorous manner in which natural and social selection eliminated the unfit. Consequently there was little opportunity for the cultivation of a deep understanding among them of the nature of mental disease. Occasionally we come across isolated passages, which make a passing reference to heredity. For example, "Our dispositions towards virtue and vice, as towards health and disease, derive from our parents and the elements of which we are composed rather than from ourselves."[9] On the whole, however, mental disease was treated as a natural phenomenon resulting from morbid body conditions. From such a standpoint, to use a familiar analogy, the soil was considered more important than the seed. The efforts of Greek physicians to minister to the needs of the mentally ill, were succeeded however, by centuries of neglect in the practice of medicine. Because of prevailing misconceptions psychiatry suffered more, perhaps, than any other branch of medicine during the Middle Ages. When the shackles of intolerance and ignorance were finally broken by Pinel and Tuke, the way was opened to a rational treatment of mental diseases, and to serious considerations of their causes.

The first effort to describe mental disease in familial language

may be ascribed to the French psychiatrists of the middle 19th century and to their immediate successors. The concepts of this school are associated especially with the name of Morel.[10] It was a fact of fairly frequent observation that in certain families there was an accumulation of individuals with varied mental and associated physical disorders. Morel asserted that these families formed a degenerate stock, recognizable through physical and mental stigmata, and that they constitute a morbid deviation from an original type. This deviation was considered transmissible from generation to generation, in an ever intensified form, until the stock finally died out in the fourth generation, having reached a stage of idiocy. The doctrine of degeneration was associated with another doctrine which has come down to us under the name of "polymorphism." This is the doctrine of psychic equivalents, and is described as follows by Morel:

"How often have we not seen epilepsy, hysteria or hypochondria in the ascendants produce the most varied forms of mental alienation in the descendants? Ordinarily one observes in the family, as in the individual, a linking of pathological phenomena, which engender one another. Here we see an individual with only an eccentric and disorderly disposition; his son causes himself to be remarked because of his very hypochondriacal tendencies, and it is only in the great grandson that there has developed melancholia with suicidal tendencies.

"If we pursue still further this hereditary transmission of evil nature, we observe imbecility or idiocy marking the existence of children—unless the sterility of parents, which is a significant phenomenon in this connection, does not put an end to this succession —which is all the more disastrous in that unfortunately it is often transmitted by the collateral branch."[11]

This theory had an immense vogue, passing over into sociology, and even into the novel.[12] In one form or other it has affected nearly all the subsequent research into the inheritance of mental disease. It comes to life in the "neuropathic taint" of American investigators, and in the "insane diathesis" of the biometrician. It has received the support of distinguished psychiatrists in England and Germany. Dr. F. W. Mott pursued it at great length and devel-

oped one of its supposed consequences into the theory of antedating, according to which the onset of the disease comes at an earlier age in the offspring, so that in consequence the stock finally dies out, a theory which has never received adequate statistical demonstration.[13]

Its immediate result, however, was to stimulate interest in the investigation of morbid heredity. Psychiatrists began to report on the incidence of defective or tainted heredity in the families of patients with mental disease. Morel himself reported positive hereditary factors in 20 per cent of his cases; and he cites Esquirol as indicating unfavorable heredity in 140 out of 265 cases.[14] Statistics of hereditary factors in the histories of the mentally diseased began to show astounding variations, different investigators reporting from 10 to 90 per cent affected. The highest percentages of taint were reported by French psychiatrists, for example, Voisin, Déjérine and Moreau. Kraepelin estimated that 30 to 40 per cent of the mentally diseased were tainted. It became the custom for hospitals for mental patients to report statistics of family histories. The New York State Department of Mental Hygiene, formerly the State Hospital Commission, reported such data annually up to 1922. In that year there were 7,015 first admissions. Family histories were obtained in 5,836 cases, and in 3,172 of these, or 54.4 per cent, a history of mental or nervous disease in the family was recorded. In 1920 and 1921 the corresponding percentages were 43.5 and 43.6. The tainting factors included mental disease, psychopathic personality, nervous diseases, mental deficiency and alcoholism.

On the whole, however, little reliance can be placed upon the comparative value of such statistics, because they were seldom compiled under rigorously defined conditions. Obviously by applying the polymorphic concept as broadly as possible, and by including sufficient generations, it is possible to establish a history of ancestral tainting in nearly every family. As Wagner von Jauregg wrote in an early paper on hereditary tainting: "The more factors one embraces in the concept of tainting, the greater the probability of finding them in individual cases, and therefore, the higher will be the percentage attributed to heredity . . . The field of investiga-

tion must be restricted as much as possible or the results must be as detailed as possible . . . "[15]

Since the above quotation was written, the quality of family studies has been improved. Oral testimony has been verified by the use of documentary records and social workers have been employed by hospitals for mental disease to take family and individual histories.

The crucial problem, of course, is the proper use of the data. The early literature is replete with citations of single families, and naturally such cases were selected because they showed a marked heaping-up of tainted individuals. It is futile, however, to rely upon such cases, for no generalized conclusion of any value can be abstracted from single pedigrees. Every family may be regarded as a combination drawn from a universe of families in which the number of different combinations is almost without limit. Representatives of any type of physical and mental defect will be met with through the operation merely of chance factors and consequently by relying upon single pedigrees, we can "demonstrate" any theory of inheritance.

We may quote from two important investigators concerning the abuses arising from the citation of single pedigrees in psychiatric literature. Wagner von Jauregg writes: "Pedigrees have been gathered in which mental and nervous diseases, suicide, etc., in brief, all those characters which are considered as taints, have been found in many members of the family. This method is of some use for didactic purposes, but as proof it is worthless. No matter how many tainting factors may appear in a pedigree, this may always be the result of chance. If I put all numbers from 0 to 9 in a bag, and draw a number four times in succession, it is very improbable that I shall draw number 9 four times in succession; but in 10,000 cases this will occur once in accordance with the laws of chance. But those only are chosen from among the pedigrees in whom severe tainting has been expressed; it would be a simple thing to contrast these with a large number of pedigrees in which only isolated taints occur, or none at all."[16] E. Rüdin states: "It is traditional to a certain degree in psychiatric literature that if one follows up etiological points of view, he should confine his interest

chiefly to tainted cases. One or more of such severely tainted families taken from one's own experience usually constitute the beginning of the investigation; then more such cases are gathered, colleagues are asked to communicate additional cases, which to the psychiatrist are considered interesting, that is, almost without exception families which are heavily tainted, therefore histories of families in which several siblings, or parents, or children, or uncles or aunts, are mentally ill. If one then has a sufficient number of cases, the material is worked up, and all sorts of general conclusions are drawn concerning laws of heredity, etc. But every psychiatrist knows families enough in which mental disorders have occurred in single cases. Of course such families, too, are more or less investigated. But if no further important taints are found, these cases are, so to speak, shelved as far as questions of heredity are concerned, on the assumption that heredity plays no part, or because, even if heredity should play a part, it is not capable of demonstration in such cases.'"[17]

It seems probable, therefore, that the study of the inheritance of mental diseases can be carried on only through the application of statistical analysis to large groups of massed pedigrees, the family histories having been prepared and verified in accordance with standardized procedure. The analysis of such data has proceeded along two lines. According to one method, we assume that inheritance exists and we attempt to fit the observations to a specified law of heredity. Accordance of observation and theory is taken to indicate the presence of heredity. According to the second method we assume no special form of heredity, but we seek for differences in the incidence of inherited taints in the mentally diseased, and in a corresponding healthy population. If significant differences are found, it is assumed that, other things being equal, they are due to the force of heredity.

The first method has proceeded along the lines of Mendelian analysis. Assuming that mental disease is a recessive character, absence of mental disease being considered dominant, the parental generations are classified according to the presence or absence of mental disease. In the work of Rosanoff and Orr,[18] which is the most widely quoted in the United States, the recessive character

was indicated not by the presence of mental disease alone, but by a wide variety of characters, all of which were assumed to be different aspects of an underlying unity, called the "neuropathic taint." This study really, therefore, considers not simply the inheritance of mental disease, but a wider concept, the "neuropathic taint." To this concept may be applied the criticism directed above to the theory of polymorphism, that it is so broad as to lose much of the rigor required in accurate classification. Moreover, many of the elements in this investigation are not discrete, but vary continuously and hence do not, strictly speaking, accord with the requirement of a unit character. In the study referred to the data are summarized in detail by the authors for each of the types of mating. The total matings numbered 206, and resulted in 1,097 offspring, of whom 146 died in childhood; no data were obtainable for 14 others. Of the 937 cases remaining for investigation, 351 were classed as neuropathic, and 586 as normal, compared with corresponding totals of 359 and 578, as required by theory. The results are apparently very close to those expected and the authors therefore feel justified in regarding the neuropathic constitution as a unit character which is transmitted in accordance with simple Mendelian requirements.

These conclusions have been severely criticized by Heron[19] because of looseness of some of the criteria employed in the concept of the neuropathic constitution, and the manner in which the statistics were treated. A more sympathetic analysis of the work was presented by Dr. W. Weinberg himself an ardent Mendelianist, who points out, nevertheless, that the results obtained by Rosanoff and Orr exceeded Mendelian requirements. Inasmuch, as the period of exposure of the siblings had not been completed, it is necessary to conclude that final investigation would add to the total of neuropathic individuals, and hence produce more recessives than the theory admits.[20]

Difficulties in the application of Mendelian analysis often arise, however, from the fact that the cases under observation are not selected randomly. As a rule the investigator begins with a series of patients who have been admitted to a hospital. But obviously such a sample would contain a disproportionate number of cases

from families with several diseased members. Weinberg has introduced a method known as the brother and sister method, which avoids in part this difficulty, by counting only the siblings of the affected individual. The underlying assumption is that the siblings will have the same genetic constitution as the affected brother or sister, but they will not have been selected in the same manner. He holds therefore that the true ratio is based upon the siblings, excluding the probands. A further difficulty, however, is introduced because of biased selection. Suppose we consider two-child families. The distribution of a recessive in such families (assuming a D R x D R mating) is represented by the binomial $(1\ R + 3\ D)^2$, where R, the recessive character, represents disease, and D, the dominant character, represents health. The binomial may be represented by 1 R R + 3 R D + 3 D R + 9 D D. This indicates that on the average there will be 1 family with 2 diseased siblings, 6 with 1 diseased and 1 healthy and 9 with healthy only, giving a total of 8 diseased and 24 healthy or a ratio of 1:3, the expected Mendelian ratio in such a case. In our institutional samples, those cases represented by D D are obviously lacking, and therefore the ratio, obtained from the remaining families would give a biased result, namely 8 diseased to 6 healthy. If, however, we base our ratio on the 6 healthy, and the family in which both siblings are diseased, we will have the correct Mendelian ratio.[21]

Rüdin applied Mendelian methods to the study of inheritance in dementia præcox, but instead of the expected 25 per cent of affected cases among siblings, he found 4.48 per cent. He therefore rejected the hypothesis that this particular type of psychosis is due to simple dominance or recessiveness but postulated dihybridism.[22] Eugen Kahn refers to a study by Soren Hansen, the Danish eugenist, who also came to the conclusion that dementia præcox is not due to a dominant or recessive factor, but that it is due either to two recessive factors or to a single dominant and one or more recessive characters.[23]

It should be noted, however, that despite its display of exact language, Mendelian analysis of the inheritance of mental diseases, even if the results were conclusive, does not afford us a biological explanation of their nature. As Myerson says: "We have estab-

lished no pathology for manic-depressive or dementia præcox. We have no absolute criteria for their diagnosis. We do not know whether they are a dozen characters rolled in one or whether they are mere diseases. How then apply Mendelian laws to their occurrence in families?"[24]

A distinguished experimental biologist, Dr. C. R. Stockard, takes decided issue with the Mendelianists in their study of human inheritance. At the meeting of the Association for Research in Nervous and Mental Diseases in 1923 at which the subject of heredity was considered he said: "Do you not believe that at present we scarcely have enough definite data bearing on the inheritance of diseases to warrant a discussion of them in the accurate and definite genetic terms which have been employed. It seems, rather, that in regard to most of these diseases we are now in the stage of gathering and controlling the accuracy of records and must still look forward to sufficient definite data for comparison and estimate in definite genetic terms. It seems impossible at present to state, for example that anyone of the diseases mentioned is due to one, two or more factors dominant, recessive or mixed. The results of desired matings and backcrosses in human stock are difficult to obtain and we are usually limited in our discussion of human inheritance, especially of disease to very general facts and terms."[25]

Further research along these lines in the application of Mendelian analysis is evidently dependent upon greater precision in the definition of the units in human heredity, and is especially dependent upon the identification of unique disease characteristics in the case of mental disorders.

The failure to establish the existence of a particular form of inheritance does not necessitate the inference that heredity is not a factor in the origin and transmission of mental disorders. It may still be possible to demonstrate the existence of generalized forms of heredity.

Defining our tainting factors in precise language, and determining the degrees of relation to be included, the first step in such an analysis is to determine the percentage of mentally sick persons with tainted ancestry. No matter how carefully the data may be verified and accumulated, however, there is always the possibility

that we are dealing not with causal relations but with mere coincidences. Myerson quotes the following well-known passage from Buckle's "History of Civilization," which presents the argument very clearly:

"We often hear of hereditary talents, hereditary vices, and hereditary virtues, but whoever will critically examine the evidence will find that we have no proof of their existence. The way in which they are commonly proved is in the highest degree illogical, the usual course being for writers to collect instances of some mental peculiarity found in the parent and in his child, and then to infer that the peculiarity was bequeathed. By this mode of reasoning we might demonstrate any proposition; since in all large fields of inquiry there are a sufficient number of empirical coincidences to make a plausible case in favor of whatever view a man chooses to advocate. But this is not the way in which truth is discovered; and we ought to inquire not only how many instances there are of hereditary talents, etc., but how many instances there are of such qualities not being hereditary."[26]

The significance of such statistics may be seen only through comparison with statistics for healthy populations. It is necessary to show that significant differences exist in the proportions of defects presented by the two series. If, for example, the normal and insane populations show the same percentages of family taints, then no significance could be attached to heredity as a factor in the causation of mental disease. Should significant differences be found, we thus establish a presumption in favor of heredity. But we do not yet possess conclusive evidence, for the differences can be attributed to the influence of heredity only through the elimination of other factors. Consequently, along with an analysis of family relationships, we must consider the environment in which the individuals were born, and in which they grew.

Kraepelin was among the first to point out the necessity of comparing the insane population with a control series. At his suggestion, H. Jost studied the appearance of mental disorders in the ascendants of healthy persons.[27] The material consisting of about 200 individuals was gathered in Strassburg, and the results pub-

lished in 1896. Jost found that not more than 2 per cent of the ancestors were mentally diseased.

P. Naecke used as a control series, 80 attendants in the insane asylum at Hubertusberg. He found that 8 had hereditary taints through parents and grandparents, 3 through siblings, and 3 through uncles and aunts, a total of 14, or 17.5 per cent. Naecke suggested an estimate of tainting amounting to 20 to 25 per cent as a minimum.[28]

These studies however, were too limited in the number of cases, and in detail of treatment to be of any significance. The first attempt to meet rigorous requirements of analysis was that of Dr. Jenny Koller whose study appeared in 1895.[29] Dr. Koller compared the family histories of 370 mental patients with a corresponding series of 370 individuals of supposedly sound mind. The histories of the healthy individuals were obtained by Professor Forel, Professor Bleuler and Dr. Koller herself. Professor Forel's material consisted of the histories of 110 individuals who, almost without exception, were attendants in the Burghölzli and Rheinau asylums in Switzerland. Professor Bleuler was responsible for 95 histories, consisting of 58 cases from the women's division of the cantonal hospital in Zurich, and 37 cases consisted of individuals from the general population. The remaining 165 histories were gathered by Dr. Koller, and consisted of 118 mentally-sound patients in the Zurich cantonal hospital, and 47 personal acquaintances. Of the 370 anamneses 150 referred to men, and 220 to women. The 370 mental patients used for comparative purposes consisted of admissions to Burghölzli in 1885 and 1886. The average age of the healthy group was 28.3 years, that of the sick 39.2 years.

The heredity was considered as direct (father and mother), indirect (grandparents, uncle, aunts), and collateral (brothers and sisters). Tainting was considered present if any of the following were found in the family history: 1. Mental disease including epilepsy, hysteria and hypochondriasis. 2. Nervous disease. 3. Alcoholism. 4. Apoplexy. 5. Dementia senilis. 6. Eccentricity. 7. Suicide. Nervousness and migrane were included under nervous disease. Under suicide were included only those cases in which the

fact of suicide could be attributed to neither mental disease nor alcoholism.

Doubt must be expressed as to the significance of some of the factors considered under heredity. Alcoholism, for example, may be the expression of a true constitutional defect, capable of transmission as a hereditary trait, or it may be a habit acquired as the result of social intercourse. From the viewpoint of heredity, it is essential to differentiate the two types, yet in practice, it is often very difficult to distinguish the one from the other without thorough investigation, not always possible for the individual investigator. For this reason the statistics of alcoholism in relation to mental disease are often unreliable, and difficult of interpretation. The category "eccentricity" (auffallende Charakter) is also susceptible of extreme variations in definition, and consequently of significance. Obviously subjective evaluation by the investigator will determine the presence or absence of such factors in many cases. As to the inclusion of apoplexy, there is grave doubt concerning its significance as a hereditary character.

In classifying the relatives, and the tainting factors two hierarchies were employed. If for example, tainting factors were reported for both father and mother, the father was given preference. As between direct and indirect heredity, the former received the assignment. Indirect heredity in turn was preferred to collateral heredity.

Such artificial restriction to a single relative and to a single taint introduces serious difficulties in the interpretation of the data inasmuch as a slight disorder in the father for example, will receive preference in classification over a serious disorder in the mother or other relatives. In another family, the serious defect might appear in an uncle, with other ancestors unaffected. In classifying the cases, therefore, it would appear that the latter family had more severe taints than the former. To avoid such difficulties two types of classification were employed by Koller, the first allocating a single taint to a single individual, the second recording all defects among all degrees of relatives.

The following table summarizes Koller's results according to the first type of classification:

TABLE 1. LEADING TAINTING FACTORS IN THE HISTORIES OF 370 MENTALLY HEALTHY AND 370 MENTALLY DISEASED INDIVIDUALS*

Hereditary taints	MENTALLY HEALTHY								PATIENTS WITH MENTAL DISEASE								RATIO OF MENTALLY HEALTHY TO MENTALLY DISEASED			
	Direct Heredity		Indirect Heredity		Collateral Heredity		Total		Direct Heredity		Indirect Heredity		Collateral Heredity		Total		Direct Heredity	Indirect Heredity	Collateral Heredity	Total
	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent				
Mental disease	22	5.9	26	7.0	9	2.4	57	15.4	72	19.5	22	6.0	19	5.1	113	30.5	1 : 3.3	1 : 0.9	1 : 2.1	1 : 2.0
Nervous disease	24	6.5	10	2.7	4	1.1	38	10.3	21	5.7	5	1.4	3	0.8	29	7.8	1 : 0.9	1 : 0.5	1 : 0.8	1 : 0.8
Alcoholism	31	8.4	23	6.2	1	0.3	55	14.9	54	14.6	6	1.6	3	0.8	63	17.0	1 : 1.7	1 : 0.3	1 : 3.0	1 : 1.2
Apoplexy	17	4.6	18	4.9	1	0.3	36	9.7	12	3.2	4	1.1	..	....	16	4.3	1 : 0.7	1 : 0.2	.....	1 : 0.4
Dementia senilis	1	0.3	8	2.2	1	0.3	10	2.7	6	1.6	2	0.5	..	....	8	2.2	1 : 6.0	1 : 0.3	.....	1 : 0.8
Eccentricity	7	1.9	7	1.9	2	0.5	16	4.3	45	12.2	4	1.1	2	0.5	51	13.8	1 : 6.4	1 : 0.6	1 : 1.0	1 : 3.2
Suicide	2	0.5	4	1.1	..	....	6	1.6	2	0.5	2	0.5	..	....	4	1.1	1 : 1.0	1 : 0.5	.....	1 : 0.7
Total	104	28.1	96	26.0	18	4.9	218	58.9	212	57.3	45	12.2	27	7.3	284	76.8	1 : 2.0	1 : 0.5	1 : 1.5	1 : 1.3

*Based on Koller, Ibid, pages 281 and 282.

Among the 370 mentally healthy individuals, there was a total of 218 with tainted relatives, representing 58.9 per cent. Among the 370 mental patients Koller found a total of 284, or 76.8 per cent, with tainted relatives. The ratio of persons with tainted family history in the two groups was as 1 to 1.3. In the healthy group parents accounted for 104 taints, compared with 212 in the sick group, a ratio of 1 to 2.0. Grandparents, uncles and aunts were responsible for 96 and 45 taints in the healthy and sick groups, respectively, a ratio of 1 to 0.5. Wagner von Jauregg and others have interpreted this as indicating that tainting among indirect relatives appears to be a safeguard against mental disease. Collateral relatives showed for the healthy group 18 taints and for the sick group 27, a ratio of 1 to 1.5. Considering the tainting factors, we find 57 cases of mental disease in the families of the healthy group, and 113 in the families of the mental patients, a ratio of 1 to 2.0. Alcoholism, nervous disease, and apoplexy represent, respectively, 55, 38 and 36 taints in the histories of the healthy group compared with 63, 29 and 16, respectively, in the relatives of the sick group. Eccentricity is a very frequent taint in the families of the mentally diseased, being exceeded only by mental disease and alcoholism. With respect to eccentricity in the families, the healthy and sick groups show a ratio of 1 to 3.2. The healthy group showed more family taints in the following: nervousness, apoplexy, dementia senilis, and suicide, the ratio of the frequencies found for the healthy and sick groups, being 1 to 0.8, 1 to 0.4, 1 to 0.8, and 1 to 0.7, respectively. Koller interprets the ratios as evidence that these taints are of slight significance with respect to inheritance. The most significant differences appear, however, when we consider direct heredity. Only 22 cases of mental disease were found among the parents of the healthy, compared with 72 among the parents of the sick, giving a ratio of 1 to 3.3. With respect to the frequency of eccentricity in the parents of the two groups, there is a ratio of 1 to 6.4. There is also a high ratio of 1 to 6.0 with respect to dementia senilis, but the numbers with this taint are too few to be significant.

In the following comparisons, all tainting factors are tabulated and taken into consideration. They are shown in Table 2.

TABLE 2. ALL TAINTING FACTORS IN FAMILIES OF 370 MENTALLY HEALTHY AND 370 MENTALLY DISEASED*

	MENTALLY HEALTHY												MENTALLY DISEASED														
	Suicide	Mental disease	Nervous disease	Eccentricity	Dementia senilis	Apoplexy	Alcohol	Total Factors		Factors per each of the 370 healthy individuals	Factors per each of the 218 healthy with taints	Suicide	Mental disease	Nervous disease	Eccentricity	Dementia senilis	Apoplexy	Alcohol	Total Factors		Factors per each of 370 patients	Factors per each of 284 tainted patients
								Number	Per cent										Number	Per cent		
Father	2	7	11	14	....	16	30	80	16.8	0.2	0.4	4	34	9	42	4	19	55	157	28.5	0.4	0.6
Mother	....	10	29	8	1	13	2	63	13.2	0.2	0.3	....	44	16	25	6	11	8	110	20.0	0.3	0.4
Grandparents	....	12	6	9	15	40	21	103	21.6	0.3	0.5	1	20	1	7	3	12	8	52	9.4	0.1	0.2
Siblings	2	27	28	14	....	3	16	90	18.9	0.2	0.4	2	69	22	21	....	4	18	135	24.5	0.4	0.5
Uncles and aunts	6	38	18	16	....	25	38	141	29.6	0.4	0.6	7	41	8	10	2	7	22	97	17.6	0.3	0.3
Total	10	94	92	61	16	97	107	477	100.0	1.3	2.2	14	197	56	105	15	53	111	551	100.0	1.5	1.9

*Based on Koller, Ibid, page 283.

The relatives of the healthy group were found to have a total of 477 taints, of which 80, or 16.8 per cent, appeared in the father; 63 or 13.2 per cent, in the mother; 103, or 21.6 per cent, in the grandparents; 90, or 18.9 per cent, among brothers and sisters; and 141, or 29.6 per cent, among aunts and uncles. Considering the 370 individuals in the group we obtain 1.3 taints per person. If, however, we base our ratio upon the 218 with tainted relatives we find 2.2 taints per person.

The family histories of the 370 mentally ill showed 551 taints, a ratio of 1.5 per patient, or 1.9 per patient for the 284 patients with tainted relatives. It may be further noted that 48.5 per cent of the taints among the relatives of the sick group were found in parents, compared with 30 per cent for the healthy group. The percentage of taints in siblings was higher in the sick group than in the healthy group. The reverse was true in the case of grandparents, uncles and aunts.

Koller also presents an analysis of a larger group of the mentally ill, consisting of 1,850 admissions to Burghölzli in the 12 years, 1881-1892, of whom 952 were males, and 898 females. Of the males, 713, or 74.9 per cent, had histories of family tainting; of the females, 734, or 81.7 per cent, had such histories. For both sexes combined we find a total of 1,447 with history of family tainting constituting 78.2 per cent of the total, a very close agreement with the percentage of 76.8 found for the preceding group.

Koller, after a complete analysis of the data, finally gives the following summary of results.

1. "The hereditary tainting of the healthy is much larger than was commonly supposed, and demonstrates the effect of regenerative factors.

2. "Apoplexy, dementia senilis and a large part of so-called nervous diseases show themselves . . . as without consequence in the question of tainting.

3. "The severest tainting factors are mental diseases and eccentricity.

4. "Alcoholism as a hereditary factor requires a closer analysis and must be divided into two principal factors. 1. Hereditary

anlage to alcoholism and mental disease. 2. Direct poisoning of the germ plasm of the drinker by alcoholic poisoning.

5. "Our results again demonstrate that tainting in distant relatives is of little significance, unless several factors fall upon one tainted individual."[30]

A decade passed before the appearance of another detailed comparison of the inheritance of tainting factors in the families of the mentally diseased as contrasted with the families of supposedly healthy individuals. In 1905 Dr. Otto Diem published a detailed study of the relative distribution of such taints.[31]

Diem's statistics of the healthy were gathered during the years 1899 to 1902, when he was an assistant at Burghölzli. His material consisted of a total of 1,193 cases, of whom 543 were males and 650 females. Of the males 317 were single, and 226 married. Of the females, 256 were single and 394 married. Of the 1,193 histories, 190 were obtained in the surgical clinic of the cantonal hospital in Zürich, 247 from the medical clinic, and 389 more from the 'Medizinischen Poliklinic.' One hundred and sixteen histories referred to attendants at Burghölzli; 80 histories came from the medical clinic of the University of Basel, and 171 histories represented individuals known personally to Diem. It will be thus seen that Diem's material was gathered in a manner very similar to that of Koller. There were some slight variations in the definitions and grouping of the taints though hardly sufficient to invalidate the comparative results. Thus Koller included hysteria and epilepsy with mental diseases, whereas Diem put them under nervous diseases.

Diem classed his cases first according to the principal tainting factor in the nearest relative, and again according to total taints. The first method requires a hierarchy, as in the case of Koller's data, and is given as follows. Tainting in the paternal line is given preference over that in the maternal line. Direct tainting precedes atavistic; the latter precedes indirect tainting, which in turn precedes that of siblings. The order with respect to tainting factors is: psychoses, idiocy, epilepsy, suicide, eccentric character, nervous diseases, alcoholism and apoplexy.

Of the 543 healthy males, Diem found 347, or 63.9 per cent, with tainted relatives. Alcoholism and apoplexy were the leading tainting factors, representing 16.6 and 15.5 per cent, respectively. Eccentric character, including crime, represented 9.2 per cent of the tainting factors. Mental and nervous diseases represented 8.7 and 8.1 per cent, respectively. Parental disorders accounted for 31.7 per cent of the taints, indirect and atavistic lines represented 28.0 per cent; and collateral, 4.2 per cent. Alcoholism and nervous diseases were the leading tainting factors in the direct line. In the indirect and atavistic lines, apoplexy was the leading taint, followed by alcoholism and mental diseases. The collateral lines showed only 23 taints, or 4.2 per cent of the total, mental disease representing 7 taints, nervous disease 4 taints and alcoholism 5 taints.

Of the 650 females, 451, or 69.4 per cent, had a history of family taint. Alcoholism, apoplexy and eccentricity were the leading taints with 18.6, 16.6, and 11.4 per cent, respectively. Direct heredity accounted for 34.0 per cent of the taints; indirect heredity represented 29.9 per cent and collateral heredity, 5.5 per cent. In the direct line alcoholism was the dominant tainting factor, followed by apoplexy. These were also leading taints in indirect heredity, but in reverse order.

In both sexes combined, there was a history of family tainting in 66.9 per cent of the cases. Alcoholism represented 17.7 per cent, apoplexy 16.1 per cent and eccentricity 10.4 per cent. Nervous and mental disease followed with 8.2 and 7.1 per cent, respectively. Direct heredity accounted for 32.9 per cent, indirect for 29.0 per cent, collateral for 5.0 per cent.

Diem's statistics for his healthy group may be compared with those found by Koller in her group of 1,850 admissions to Burghölzli. Of the 952 males in the latter group, 713, or 74.9 per cent, had a history of family tainting, compared with 63.9 per cent as reported by Diem. Among the females, 734 of the 898, or 81.7 per cent, had family taints compared with Diem's 69.4 per cent. For both sexes combined Koller reported family tainting in 78.2 per cent, compared with 66.9 per cent in the families of Diem's healthy group. The ratio of individuals with tainted heredity in the healthy

group to that in the sick group was 1 to 1.17 for males, 1 to 1.18 for females, and 1 to 1.17 for both sexes combined.

Diem used as a control series, a group of 300 patients admitted to Burghölzli in 1902. He found family tainting in 239 cases, or 79.7 per cent of the total. The tainting occurred in the direct line in 56.3 per cent of the cases, in the indirect lines in 15.7 per cent, and in the collateral lines in 7.7 per cent. Alcoholism represented 29.3 per cent of the taints; mental disease, 16.7 per cent; and eccentricity 13.3 per cent. The ratio of family taints is thus 66.9 per cent among the healthy group to 79.7 per cent among the diseased, or 1 to 1.19. In the direct line this increases to a ratio of 32.9 per cent to 56.3 per cent, or 1 to 1.75. Limiting the comparison still further to mental disease, we find a ratio of 7.1 per cent to 8.0 per cent or a decline to a ratio of 1 to 1.14.

A further comparison may be made with a larger group of 1,665 admissions to Burghölzli from the years 1893 to 1902. Of these patients, 1,270, or 76.3 per cent had a history of family taint. The tainting was in the following order: direct, 52.6 per cent, indirect, 14.3 per cent, collateral, 9.4 per cent.

The relatives of the 1,193 individuals in Diem's healthy group showed a total of 1,945 taints, of which 294, or 15.1 per cent, represented mental disease; 291, or 15.0 per cent, represented nervous disease; 413, or 21.2 per cent, represented alcoholism; 358, or 18.4 per cent, represented apoplexy; 144, or 7.4 per cent, dementia senilis; 414, or 21.3 per cent, character anomalies; and 31, or 1.6 per cent, suicide. Based upon the 1,193 individuals, there were 1.6 taints per person. Considering only the 798 in the group who had family taints, we find a ratio of 2.4 taints per person.

These results may be compared with data reported by Koller for her group of 1,850 patients admitted to Burghölzli from 1880-1892. Corresponding to these patients there was a total of 2,451 family taints, or 1.3 per person, compared with 1.6 in Diem's healthy group. Considering only those individuals with tainted relatives, we find a ratio of 1.7 taints per person in Koller's group, compared with 2.4 per person in Diem's healthy group. These results are somewhat surprising and contrary to our expectations. However if we consider only the fathers and mothers, we find that the

healthy group shows 0.2 paternal and 0.1 maternal taints per each of the 1,193 mentally healthy individuals, compared with 0.3 and 0.2, respectively, in Koller's group of 1,850 mental patients.

Diem summarizes his results as follows: "My study indicates that much of existing statistics is worthless, that the problem is not as simple as it appears. However the study gives us positive results, it confirms the common experience that mental sickness may be inherited like health, and that the danger of contaminating heredity must not be underestimated, that it is, above all, very serious in the case of mentally diseased parents, and that also in the case of mentally diseased siblings it presents serious prospects, which must be considered."[32]

We summarize one more study in which the inheritance of a group of mental patients is compared with that of a corresponding group of healthy individuals. This is a study by Dr. Phillip Jolly, which appeared in 1913, and consisted in a comparison of a series of 200 mental patients with a corresponding series of 200 healthy individuals.[33] In order to avoid the introduction of subjective errors, arising from the handling of data by several investigators, Jolly himself examined about 1,000 admissions to the clinic for mental and nervous diseases at the University of Halle from whom he finally chose 200 cases as being sufficiently detailed in history to justify further analysis. His healthy group consisted of 98 spouses of his patients, the former being themselves free of any disease, and about 100 patients from the Polyclinic in Halle, suffering from exogenous diseases, such as skin disorders. The two groups of healthy individuals and mental patients had a sex ratio of 115 females to 85 males. The healthy individuals averaged 43.3 years in age, the mentally ill 36.9 years.

Jolly's tainting factors consisted of 1. Mental disease, including general paralysis, and congenital and acquired feeblemindedness. 2. Functional nervous diseases. 3. Organic nervous disease (including tabes and epilepsy). 4. Apoplexy. 5. Alcoholism. 6. Dementia senilis. 7. Suicide. 8. Character anomalies.

In the healthy group there were 93 individuals with family taints, representing 46.5 per cent of the total. Parental tainting was found in 42 cases, or 21 per cent; the siblings presented 19 cases,

or 9.5 per cent; the uncles and aunts, 27 cases, or 13.5 per cent. The grandparents provided only 5 cases, or 2.5 per cent. The principal tainting factors were alcoholism, mental disease, organic nervous disease and character anomalies in the order named.

The group of mentally diseased showed family tainting in 129 cases, or 64.5 per cent. The parents provided 62 cases of tainting, or 31.0 per cent; the siblings 29 cases, or 14.5 per cent; the grandparents 20 cases, or 10.0 per cent; and the uncles and aunts 18 cases, or 9.0 per cent. Mental diseases constituted 49 taints, alcoholism 30, and character anomalies 14. Considering all relatives and all taints, the ratio of taints of the healthy group to those of the diseased group was 1 to 1.4. As in the experience of Koller and Diem the ratio of tainting increases as we pass to the direct line, the ratio therein being 1 to 1.5. Considering mental disease alone, the ratio in the direct line was 1 to 4.0, repeating the experience of Koller and Diem.

Considering all tainting factors, we find that the healthy group showed a total of 147 family taints, or an average of 0.7 taints per person; the diseased group showed a total of 263 family taints or 1.3 per person. Considering only the individuals with family taints in each group we obtain 1.6 taints per person for the healthy group, and 2.0 per person for the diseased group. Mental disease was the largest tainting factor, accounting for 22.4 per cent for the healthy group, and 32.3 per cent for the diseased group.

In broad terms, therefore, Jolly confirms the findings that the families of the mentally diseased are tainted to a higher degree than are supposedly healthy individuals and that the tainting is especially marked in the parental lines.

In interpreting the results of these investigations, we must pay special attention to the adequacy and representativeness of the samples used for comparative purposes. By using institutional cases as the point of departure for a sample of mental cases, we at once cause the objection that such cases ordinarily represent only the more severe types of mental disease, and that consequently they are not representative of the great numbers of the mentally ill who are not hospitalized. The ratio of tainting found for such a

group may exceed that for all types of the mentally sick. Without denying the force of the argument, it must be admitted that as a practical procedure one is compelled to start with the institutional population, first, because such patients are immediately available for investigation, and secondly, because they present what is after all, the most serious aspect of the problem of mental disease. To reason about what might be true of the non-institutionalized cases, who for most purposes, are beyond the field of investigation, is to pursue chimeras. We may therefore conclude, that whether or not the institutional insane differ in important particulars from the non-institutionalized insane, they nevertheless present a very important problem for study, a problem enhanced by the very fact of the necessity for their institutionalization.

Obtaining a sample of the healthy population is a task of far greater difficulty, however. In the first place, as Wagner von Jauregg, pointed out in 1902, the sample of the insane is drawn from a comparatively small population, whereas the healthy are drawn from a very large population.[34] Thus a sample of the insane in New York would be drawn from a hospital population of 50,000. A corresponding sample of the non-insane would be drawn, however, from a population of over 12,000,000. Consequently if we choose equal samples of the two groups the possibility of random variations is decidedly greater in the sample drawn from the larger population. Both samples should be similar in all respects to the populations from which they are drawn. This means that the sample must have the same composition with respect to sex, age, race, social constitution and other important characteristics, as the universe of individuals from whom it was selected. Clearly the larger the population from which the sample is drawn, and the more complicated its make-up, the more difficult will it be to make the sample truly representative. In view of this important possibility of bias, particular attention must be devoted to the character of the control series used by Koller, Diem and Jolly.

In the first place, these authors did not pay adequate attention to the matter of age. It is well-known that the incidence of mental disease increases with age, and consequently the older a population, the greater will be the relative number of its insane. It is

insufficient for this purpose merely to quote average ages, as these authors do, for it is very evident that fundamental differences in age distributions may exist side by side with equality of averages. Not knowing the complete age distributions of the samples, we do not know what the total of insane would be, when the groups healthy and insane, will have had equally long exposures. Furthermore for reasons which will appear shortly, it is probable that the group of apparently healthy really included some diseased individuals. Their inheritance, with due regard to the factor of age, should have been included with the group of mentally diseased. There is, therefore, some reason for believing that the differences between a group mentally healthy, and one mentally diseased, with respect to family taints are in fact greater than those reported by the authors.

In the second place, these investigators did not consider the size of the family. We know, of course, that each patient has but one father and mother, and four grandparents, but we do not know the number of uncles, aunts or siblings. The larger the number of brothers, for example, the greater will be the expected number of tainted brothers. The statistics cited in the preceding studies inform us of the number of tainted relatives of specified degree of relation, but their significance obviously depends not upon the number of individuals in the selected samples, but upon the size of their families. We should know the ratio of tainted siblings to the total number of siblings, etc. Furthermore since marriage rates and size of family are of different orders among the healthy and the diseased, the family groups will vary accordingly. Consequently the statistics of tainted relatives as cited by the above authors are of little significance, so far as brothers, sisters, uncles, or aunts are concerned; and it is possible that some of the apparently discordant results cited by Koller and Diem arise from this source of error. It should be remembered that it is only after tracing all relatives through the entire period of exposure, that we are in a position to measure the relative incidence of defect in the stock.

A third source of error arises from the manner of selection of the supposedly healthy population. To begin with, this consisted largely of individuals, who at the time of selection were physically

ill, though described as mentally healthy. Nevertheless there is a well-marked association between physical and mental disease so that a population selected at any time from the physically ill would probably have a larger number of individuals with tainted relatives than would a thoroughly healthy population. In the second place a large part of the healthy population was selected from the class of hospital attendants. Here we meet with a form of social and economic selection. While we are unable to quote exact statistics on this point, there is good reason for believing that the rate of mental disease varies with social status. We must therefore expect that a group selected from a lower economic level, will, other things being equal, provide a higher rate of mental disease. The supposedly healthy populations may, therefore, have been weighted with inferior stock, thus resulting in undue proportions of taint in the healthy families.

Rüdin expressed a keen criticism of these two points as follows: "Diem carried out his investigations not upon individuals whose nervous systems were really intact throughout, but only on 'individuals who had not yet been interned and who were not acutely ill mentally.' He himself calls this a misunderstanding of the concept of healthy . . . But we are also prohibited from using the expression 'statistics of healthy individuals' by a second circumstance, the fact that Diem's 'healthy' were chiefly hospital patients. The value of Diem's study does not consist so much in the fact that we now know how much the healthy are tainted, but in the fact, that we now know how severely other sick individuals are tainted, in comparison with the mentally ill. This is quite different. In the hospitals one finds patients with tuberculosis, cancer, diabetes, etc., in proportions such as one does not find in the population as a whole. Tuberculosis, cancer, diabetes, etc., are diseases, which according to any number of serious investigations, together with mental diseases and other anomalies of the nervous system, point with a high degree of probability, and in some cases with certainty, to a common constitutional basis. Under these circumstances, it does not seem to us possible to treat as similar the nervous anlage of a hospital population and a healthy population . . . We consider both population elements" (hospital attendants and univer-

sity officials) "as more justified than hospital patients in bearing the name of healthy individuals but they too surely present a certain selection of the general population, which must influence the results of the foregoing statistical investigations in part in an undesired manner."[35]

The operation of these several selective factors makes it highly probable that the differences in the percentages of tainting are greater than those suggested by Koller, Diem, and Jolly, and almost certainly significant in the statistical sense. As previously indicated this establishes a presumption in favor of heredity as a general factor in the causation of mental disease. But until we have compared the two groups with respect to environmental differences, we are not logically in a position to state definitely that heredity is the sole or even the more important factor. In the preceding studies the environmental conditions of the two groups were manifestly different and consequently there is the possibility that the degree of tainting may be associated with differences in social stratification.

In the following chapters we shall study both family history and environmental setting in the case of two groups of patients, one with dementia præcox, and the other with manic-depressive psychoses. The limitation of the analysis to specific groups of mental disease finds its justification on the same grounds as those underlying the investigation of specific physical diseases, rather than disease as a whole. Each specific type of disease has its own characteristics and is modified in different degrees and ways by variations in heredity and environment. By studying mental disease as a whole we not only associate diseases which may have no specific similarities in origin and development, but we conceal any important differences that may exist with respect to both heredity and environment. In studying dementia præcox and the manic-depressive psychoses we rule out certain exogenous factors, such as traumas, which, so far as known, have no essential relation to the disease process, and thereby we are enabled to throw into sharper outlines the relative forces of heredity and environment. These two groups of diseases furthermore are of special social import, be-

cause they form the largest categories of our State hospital populations, and are therefore responsible for great financial burdens upon the State.

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BOOK REVIEWS

Experimental Catalepsy. The Action of Bulbocapnine in Cats and Monkeys with Various Experimental Lesions of the Nervous System. By ARMANDO FERRARO, M. D., and S. E. BARRERA, M. D. State Hospitals Press, Utica, N. Y., 1932.

Even a casual reading of this interesting monograph discloses a vast amount of work done for the purpose of gaining more precise information regarding the action of bulbocapnine. A series of experiments on cats and monkeys from whom parts of the brain had been excised form the basis for discussion and conclusions. The individual experiments are reported in detail with notations of the behavior of the animal after operation and later when under the influence of bulbocapnine.

Before the experimental data are presented the authors give us a fairly complete review of the studies which have thus far been made on the action of bulbocapnine, and with particular reference to the motor phenomena induced in the higher animals with suitable doses of this drug. Most of these phenomena have previously been referred to as evidence of experimental catatonia. The authors of the present monograph prefer the phrase "experimental catalepsy" but when the meanings of catatonia and catalepsy are compared it is doubtful whether this preference would be generally held.

A more careful study of this monograph especially by one familiar with the action of bulbocapnine provokes a number of comments. Frequent reference is made to the work of de Jong and Baruk, dealing with essentially the same subject. As I had the privilege of working with de Jong for several months on these problems, I am much interested in the comparisons made.

It seems that as far as the manifestations of bulbocapnine intoxication in normal mammals are concerned there is agreement as to the similarity of the motor phenomena with that of human catatonia.

Some of the more important differences in observations and conclusions involve the question of what part of the nervous system is chiefly concerned in catatonia or whether or not the cerebral cortex is a necessary component. The authors assume that de Jong and Baruk have accepted the cerebral cortex as being a necessary component. As a matter of fact, in the general conclusions on page 126 of their monograph "La catatonie experimentale" is found the much more conservative and modest statement: "La question

de la localisation de la catatonie n'est pas encore résolue . . . Il faut donc une nouvelle série d'expériences systématiques dans la série animale pour pouvoir tirer des conclusions localisatrices plus décisives."

It is my impression that other statements have been overemphasized but it may be sufficient to tarry a moment with this one. Ferraro and Barrera conclude: "The results of our experimental work confute . . . the conclusions of those who believe that the presence of the cortex is essential for the appearance of cataleptic manifestations following bulbocapnine intoxication." Such a positive statement invites us to inspect the evidence for it.

In the first place it is unfortunate that the authors did not give us a clearer picture of the behavior of the normal mammal under the influence of bulbocapnine. For this it is necessary to refer to page 48 of the monograph by de Jong and Baruk where a cat will be seen in almost inverted vertical position, with the hind legs still resting on the seat of a chair and the fore feet on the floor. This is a most unnatural position for a cat to maintain. On page 73 of the same monograph will be found a series of 20 photographs from a motion picture of a monkey showing a fixed attitude. In my own report on "Catatonia in Animals" (Amer. Jour. Psychiat. 11:767) is shown another motion picture film of a cat hanging from the back of a chair merely by its fore paws. A cat under the influence of bulbocapnine maintains such a position for at least ten minutes or until the maximum effect of the drug has passed.

Then we might turn to the illustrations of Ferraro and Barrera. We find that they are all single films, that in practically all of them when the animal is said to be hanging it is actually standing on the floor and in some of the experiments in which a large portion of the brain has been removed it appears that the animal is leaning against the support rather than suspending itself.

A similar comment might be added regarding the so-called bridging of the gap. The normal cat under the influence of bulbocapnine when placed on two chairs actively supports itself with its legs and as these chairs are separated the cat continues thus to support itself until the legs can no longer span the gap. The animal then drops either the hind or fore legs to the floor and remains in this awkward position.

In the illustrations of Ferraro and Barrera the animal uses its neck and the posterior portion of the trunk to support itself. Unilateral excisions are particularly inconclusive because the animal can still support itself with the unaffected side and its neck.

It necessarily follows that when higher motor centers are removed from control the tendency to rigidity increases, provided that the animal lives

long enough to survive the flaccid paralytic stage. Most of the illustrations show the animals still in a state of flaccid paralysis and Fig. 76 seems to demonstrate merely the effects of such a paralysis. The so-called "maintenance of limbs in passively impressed attitudes" with the fore limbs abducted to nearly 180 degrees seems to show in many of the illustrations that a paralyzed animal cannot rise, rather than the effects of bulbocapnine. In any case it is unfortunate that the authors did not somewhere in their illustrations show the animal in identical positions before and after bulbocapnine intoxication.

Without attempting to call attention to many of the other interesting details in the authors' work I will merely comment upon their tenth general conclusion. They say: "More significant for the the identification of experimental catalepsy with catalepsy in human catatonia would be the reproduction of cataleptic manifestations through the use of endogenous toxins found in abnormal amount or combination in the human body in the course of catatonic dementia præcox." This has already been done by de Jong and his associates. Their work is mentioned in my article on "Catatonia in Animals" op. cit. page 782 and published in January, 1932. It has also been reported in detail in the Ztschr. f. d. ges. Neur. u. Psychiat., Band. 143, Heft 3 u. 4. The report describes catatonic motor phenomena induced in mammals by the injection of a substance found in human urine. These phenomena seem to be identical with those of bulbocapnine intoxication.

All psychiatrists and others who are interested in trying to solve the most serious and perplexing problem of the etiology and nature of catatonia should carefully study the work of Ferraro and Barrera. There may be differences of opinion regarding the conclusions which are drawn. Instead of showing the errors in the deductions of de Jong and Baruk it is my opinion that the authors' work tends to confirm these deductions. However that may be, we now have in English a good account of a new type of experimental research in psychiatry.

GEORGE W. HENRY.

Case Studies in the Psychopathology of Crime. By BEN KARPMAN, M.D. 1007 pages. 1933. The Mimeoform Press, Washington, D. C.

There are five case studies in this ponderous volume. Each case study is the complete life story of a criminal and is as long as an ordinary novel. These cases were patients in the Department for Criminal Insane at St. Elizabeth's Hospital and the method of presentation is as follows:

First comes the "Official Record." This contains the routine anamnestic and biographic material obtained from the patient at his admission and

during his stay in the hospital. Physical psychological, routine psychiatric and conference examinations by other physicians are included in this record.

Then comes the *pièce de résistance*, "The Case Study Proper," which is the material collected by the author himself in his intensive study of the case. There is surprisingly little in this material to suggest the fact that the author is a psychoanalyst. Psychoanalysis, he tells us, is applicable only in a few selected cases. One method used in the collection of this data is the questionnaire method. "Without any suggestions on the part of the examiner, the patient is asked to write his own history (which is usually very brief and inadequate) and on the basis of the material obtained, questions are made out, the answers to which are then incorporated in the original and serve as a basis for another questionnaire; the process being continued until the history is satisfactorily completed . . . Interviews are occasionally held, the frequency depending upon the individual case. In some cases I would start with free associations or a number of sessions, and on the basis of material obtained use the questionnaire method, this in fine being followed by active analytic technique." Additional information was obtained from every available source, including observations by fellow inmates and the letters of the patient.

The material obtained from the patient is presented in the form of an autobiography. The criminal is made to tell his own life story, the author of the book being merely his editor. The aim of the author has been to stick as closely as possible to the original form of presentation, because he felt that it was more important to give a true picture of the workings of the patient's mind than to transcribe into flawless English. But as there are very few of these patients who are able to express themselves in grammatically correct and contextually clear language, he found it necessary to transcribe all of this material into language that would be true to the meaning of the text and at the same time not offend the reader's ear. This difficult task the author has performed with admirable skill. He has found it possible to achieve the original construction to preserve the flavor of the personality of the criminal who is the subject and the real teller of the tale. The only criticism one would be inclined to offer in regard to these life histories is that they have been presented in too great detail. One gets a trifle bored, for example, with the detailed accounts of the innumerable sexual experiences of Ellis Walker and feels that nothing of any great importance would have been lost if a certain number of them had been omitted.

At the end of "the case study proper" comes a brief epitome in which are incorporated the high points of the case. It is not until after the facts

are all in that the author indulges in the luxury of presenting his theories and interpretations of these facts. These interpretations are in the main psychoanalytic but they are presented very briefly and the reader may take them or leave them as he sees fit. The unbiased presentation of factual material and the clear separation of fact and theory leaves the reader free to draw his own conclusions and thus renders the book almost equally acceptable to all schools of thought.

There is no doubt that Dr. Karpman has given us in these five case studies an authentic and interesting collection of human documents. They constitute a unique and valuable contribution to the literature of crime and one cannot help being impressed with the sincere, laborious and painstaking work that has gone into their preparation. The first step toward an understanding of the problem of crime is a knowledge of the men and women by whom crimes are committed. This book brings the reader into intimate contact with five different criminals and affords him an excellent close-up picture of their personalities. The impression which they produce upon him may not be pleasant, but pleasant or unpleasant, they are types of personality which must be studied and understood before we can hope to deal intelligently with the problems which they present.

MILTON HARRINGTON.

The Delinquent Child. From the White House Conference. Published by "The Century Co." 499 pages, $3.50. The Century Co., New York.

Presented in this volume is a concise exposition and summation of the pertinent facts and knowledge relating to the study of the delinquent child. It is a report of the Committee on Socially Handicapped Delinquency, a publication of the White House Conference on Child Health and Protection, called by former President Herbert Hoover. Delinquency and the child in all its many phases was investigated by the committee in a most thorough manner. The findings and recommendations are reported in this volume.

Introductory to the main body of the book are copies of brief addresses delivered at the White House Conference meetings by the Hon. Frederick P. Cabot, executive committee chairman, James S. Plant, M. D., and William A. White, M. D.

The delinquent child was investigated and studied in his relation to himself, family, school, church, industry, community influences, the state and the municipality. Sub-committees reported on each of these elements, comprising the delinquent child's environment. Statistical study showed that 200,000 children each year are brought into juvenile court as delinquents, not including a larger group dealt with by the police but not by a court.

This, in itself, presents sufficient reason for undertaking such a complete study as the committee made.

Throughout the report is emphasized the basic personal needs of the child, the need to feel secure and the need for growth and development. The report recognizes that our social institutions possess similar needs which conflict and clash with those of the individual child. Delinquency is one of the natural products of this conflict. The report stresses the fact that if the problem of delinquency is to be made less severe, development of the child's needs is not only imperative, but also necessary is the development of the needs for security and growth of all individuals and institutions with which he comes in contact. Only when the problem of the delinquent child is attacked from both these angles can we hope for any real solution to the problem.

The report stresses, and rightfully so, the predominant importance of studying the delinquent in relation to himself. The delinquent and not the delinquency is of primary importance. It further stresses the need to use all the various available facilities in studying the delinquent child, as well as utilizing the most expert help at our disposal in order to better understand the delinquent, his assets, liabilities and latent possibilities for a fuller life. Only when we have a clear understanding of these factors can we institute proper corrective measures and re-educate the delinquent.

In discussing the relationship of the child to the various social institutions, comprising his environment, the report describes in detail what their past attitudes have been towards the child, especially the delinquent child, where and why they have failed in their duty to the child, what improvements in their attitudes and methods have occurred in the recent past and present, what is still lacking and necessary, recommendations as to how they can still be improved and what their future policies should be.

Although much important statistical data is presented throughout the report, the committee was considerably handicapped in many instances in compiling this data because the desired information and figures from many parts of the country were either incomplete or not available.

In the appendix are incorporated several reports on subjects closely related to the delinquent child, as well as subject reading lists and a bibliography.

"The Delinquent Child" is an exhaustive study and is strongly recommended to all persons who directly or indirectly are engaged or interested in child welfare work. It will be assigned a prominent position on all reading lists pertaining to delinquency and children.

DONALD W. COHEN, M. D.,

School, Home & Co. By S. S. DRURY. Farrar and Rinehart, New York.

The headmaster of St. Paul's School presents herein 14 essays dealing with various phases of the school situation. These include discussions on the meaning and value of education, the relations of parents, teachers and pupils and problems of the teacher and the adolescent youth. All are interesting, several quite stimulating and challenging. In the first four, addressed to teachers, he holds before them a revealing mirror, directing them to observe themselves objectively and dispassionately, analyzing some of their shortcomings and gently urging them to a closer adherence to basic pedagogical principles. Several essays are primarily directed at parents, one of them including a decalogue of sound advice and practical suggestions which make an ideal program for a healthy parent-child relationship. The rest consist mainly of suggestions to students with the purpose of helping them to so organize their activities that their school experience may be as constructive and as complete as possible.

As the cover blurb states, the book embodies much of the author's wit, charm and real wisdom. These qualities, always welcome, are usually at a premium in the writings of schoolmasters. He avoids the stylistic evils of pedantry and finger-wagging but is not completely free from academic influence, however, and there is a faint but unmistakable atmosphere in his writing of classrooms and ivy-covered walls. He is also a Christian minister and has a regrettable tendency to solve all problems by recourse to the Holy Writ. This leads him to some rather dogmatic assertions as for example, "Human conscience is a special creation; what we call right and what we call wrong is not the result of evolution but of revelation." Some of his observations and aphorisms, however, epitomize and illuminate with crystal clarity, the fundamental problems of education. Particularly worth remembering are: "To impart knowledge is a creative act," "The problem of handling boys comes down to a right handling of ourselves," "Great teaching lies in the appreciation of inconspicuous scholars," as well as others too numerous to mention.

The reviewer enjoyed most two essays which the author seemed to let in by the backdoor as if he were rather ashamed of them. In one called "Unposted Letters," he figuratively took off his frock coat and silk gloves and apostrophized parents and trustees in a manner calculated to make them writhe very uneasily in their comfortable chairs. The other is the real cream of the book. It consists of excerpts from a friend's correspondence and is a brilliantly keen and trenchant criticism of a typical private preparatory school. That alone is worth the price of the book.

IRVING J. KNAPP.

Prohibiting Minds and the Present Social and Economic Crisis. By STEWART PATON, M. D. 198 pages. Price $2.00. Paul B. Hoeber, Inc., New York.

We have come to expect philosophic writings, from the viewpoint of the scientist, from Julian Huxley, J. B. S. Haldane, H. O. Wells and some other English writers, but fewer such writings emanate from American writers. To interpret the meaning of biological facts in their relation to the affairs of the world requires familiarity with more than one science, and a certain amount of leisure as well.

Dr. Stewart Paton is a psychiatrist and a physician with active interests in biology. But he has leisure only in that he is free from active medical practice. His past writings have been thought-provoking and interesting. The present volume of 198 pages is no exception. It is a timely book, although it deals more with the mind and less with prohibition than its title implies. In respect to the prohibiting mind, Dr. Paton points out that there have always been persons who have something like a compulsion to prohibit others from doing things. They wish a law upon which to hang their prohibitions, with the result that they make a policeman the guardian of their conscience rather than permitting the exercise of choice. Other pages of the book contain indications of Dr. Paton's researches in human problems referring as they do to such wide and varied subjects as birth control, modern education, recent political and economic problems, race development and other topics which are confronting a perplexed and bewildered world today.

BROWN.

Personality, Many in One. By JAMES WINFRED BRIDGES. 215 pp. The Stratford Company, Boston, 1932.

The author discusses the meaning of personality with emphasis upon the psychological aspect. He analyzes the psychological personality into three major aspects: knowing, feeling and impulse or drive and discusses each of these aspects. Individual differences in character come about through excessive impulsion, deficient impulsion, excessive control and deficient control. Emphasis is placed upon the importance of synthesis and integration of the component parts and processes of personality into a unified whole. Some types of imbalance in the total personality are described. Some suggestions are made for the better integration of personality. Classifications of psychological types by different authors are described. The building of the personality is regarded as a work of art with training and the power of love as important factors in the building.

MARGARET HAYES.
New York State College for Teachers.

Adjustment and Mastery. By ROBERT S. WOODWORTH, Ph. D., Sc. D. 137 pages. Price $1.00. The Century Company, New York.

This booklet by Dr. Woodworth, professor of psychology at Columbia University, is one of a series; others of which deal with aviation, astronomy, evolution, eugenics, chemistry and other subjects. This book necessarily deals in generalities with the subjects listed in its 13 chapters included in which are the psychology of mastery, emotions, desires and motives, maladjustments, misconduct, team work and other subjects. In chapters dealing with such subjects as emotions, the intellect, motives and adjustments, there is much the reader may learn about his own mental processes; but somehow one feels that Dr. Woodworth is limited by his tools, which in this case are psychological methods. One can learn of the fundamentals of the intellect by observing rats in a maze but if one wishes to view a noble edifice, it is necessary to see beyond the foundations. This however, is a limitation of psychology and not of Dr. Woodworth. His first chapter, "Is Progress Good for Us?" dealing with man, machines and progress, offers food for thought, reflecting as it does views of life by one who through extensive scientific knowledge has gained deep insight into human affairs.

BROWN.

A Century of Public Health in Britain. By J. H. HARLEY WILLIAMS. 307 pages. A. and C. Black, Ltd., 4-5-6 Soho Square, London, W-1. Represented in New York City by The Macmillan Company.

This book gives a detailed and comprehensive study of the evolution of public health measures in the last one hundred years in Britain. The writer gives an outline of the development of the Poor Law and public health together, as preventive medicine had its beginning as an outgrowth of the Poor Law.

Legislation to care for the poor was made necessary by the abolition of the monasteries by Henry VIII and the destruction of their system of hospitals, asylums, and almsgiving to the poor. The writer outlines the social and legal changes which have led to the present system of public health measures. It was not until 1838 that a commission was appointed to inquire into the cause of ill health among the laboring population. The first public health act was passed in 1848. The writer discusses the important advances made in medicine and sanitation in a scientific manner but the book is not written in technical language and its readers should not be confined to the medical profession.

In the last five chapters of the book the writer discusses some leaders in the field who have contributed to the development of better public health

service and sanitation, namely, Edwin Chadwick, John Simon, Florence Nightingale, Francis Galton and Lord Shaftesbury. In Appendix I there is a note on the principal powers and duties of the larger local authorities in regard to public health. In Appendix II there is a note on the local government "Scotland" Act of 1929.

This book shows clearly the stormy course of the evolution of modern health laws and indicates that there will be a further expansion and development in the field of public health and preventive medicine.

JAMES L. TOWER.

Social Pathology. By JOHN LEWIS GILLIN, Ph. D. 506 pages. $3.75. The Century Co, New York.

Social pathology is defined as the study of man's failure to adjust himself and his institutions to the necessities of existence to the end that he may survive and meet fairly well the felt needs of his nature. From birth to death, life is a struggle for existence, and the individual possesses an inherent physical and mental endowment, which, together with his environmental conditions, modifies his method of adjustment.

Dr. Gillin, professor of sociology at the University of Wisconsin, has in this volume considered the various influences which break the adjustment between the individual and society, and by the use of illustrative case histories and numerous statistical reports has shown the widespread existence of maladjusted individuals.

Under separate headings are considered (1) the pathology of the individual, (2) of domestic relationships, (3) of social organization, (4) the breakdown of economic relationships, and (5) the pathology of cultural relations.

The discussion of the individual's pathology shows the effects of sickness, blindness, deafness, disablement, drug addiction, alcoholism, mental deficiency and mental disease, on the individual and on his family.

The pathology of domestic relationships is discussed under various headings, such as widowhood, divorce, dependent and neglected children, illegitimacy, prostitution, etc.

In similar fashion the other major pathological groups are considered, with a discussion of urban and rural disorganizations, poverty and dependency, women and children in modern industry, etc. The latter chapter is of particular interest because of the present opinion of the U. S. Department of Labor regarding this problem.

The book is comprehensive, and well worth reading by anyone interested in or desirous of obtaining information concerning this subject.

In the final chapter the author summarizes his views on social pathology, as follows:

1. Humans vary in inherited traits, beliefs, and patterns of conduct.
2. Groups have built up methods of responding to life situations.
3. These responses or "norms" grow out of a total life situation, and hence the reactions in any field of relationships (e. g., the religious or the domestic) are fitted to the economic patterns of conduct and vice versa.
4. After long periods, customs develop.
5. Change in one phase of life often occurs without directly affecting the other.
6. The socially approved relationships in one field become less reasonable or beneficient owing to changed conditions in another field.
7. Since these social "norms" interlock, a lag in change of norms in one field of social life creates disharmony with those of another field.
8. Conflict between habitual norms and the requirements of new life-situations leave the individual confused and disturbed.
9. While a part of the public supports the old pattern, and another supports the emergent code, ill-intentioned individuals and even well-intentioned "cranks" are less controlled and freer to behave as they please, to the detriment of their fellows.

From such an analysis it becomes evident that any type of reconstruction must concern itself both with the individual and with society, and the production of complete harmony between them, will, if possible to achieve, produce a well-adjusted species. Unfortunately, there is no short-cut to this end.

H. SMOLEV.

Six Theories of Mind. By CHARLES W. MORRIS. 337 pp. $4.00. The University of Chicago Press, 1932.

Six major theories of mind are examined critically. These are: mind as substance, mind as process, mind as relation, mind as intentional act, mind as substantive, and mind as function. The author points out that the present dominant functional theories of mind which define mind in terms of symbolic process, really preserve the themes of each of the other five theories.

The author's treatment is critical and thorough. Surely, no one who is interested in the pragmatic movement can afford to miss reading this book. It is, however, a book for a reader with scholarly interests in this particular subject.

J. ALLEN HICKS.
New York State College for Teachers.

Outline of Preventive Medicine. Twenty-four contributors. Edited by Frederic E. Sondern, M. D.; Charles Gordon Heyd, M. D., and E. H. L. Corwin, Ph. D. Second edition. 462 pages. Paul B. Hoeber, Inc., New York.

This second edition has been revised and further enlarged by the addition of three new chapters. Each contributor has presented a brief, but clear outline of his special subject, with regard to known etiology and the environmental influences which permit the development of disease states.

Advice as to preventive measures is given clearly, with avoidance of technical detail. Each disease, medical, surgical and special, is commented on, with discussion as to the correct method of treatment.

Stress is laid on the periodic health examination, as to the most valuable procedure in individual prevention.

The importance of early instruction on physical and mental hygiene in childhood and adolescence, is emphasized.

This book should be of assistance, not only to the general practitioner, but also to the specialist, as it gives a broad survey of the whole field in a manner that lends itself to easy reference. It is well indexed.

LANG.

Our Social World. By GRACE and WILSON D. WALLIS. McGraw-Hill Book Company, New York, 1933.

A frequent and, in the opinion of the reviewer, thoroughly justified criticism of our educational system is that it fails in what should perhaps be its most important function—namely, to create an intelligent social consciousness. An educated person should certainly have some knowledge and understanding of the social world of which he is a part. And yet there is the undeniable fact that the average high school graduate is not only ignorant of the nature of the social forces that collectively comprise our civilization but can hardly be said to be very curious about them. Without a sufficient background of knowledge, it is not to be expected that he should be able to grasp the significance of the changes that are occurring in his own times.

Perhaps the neglect of such an obviously important subject as sociology in the high school curriculum is due to the difficulty of presenting it in such a way as to make it both interesting and comprehensible to a boy or girl of high school age. Here is a book which affords help to the teacher. Some of the topics dealt with are: The meaning of society and culture; custom, tradition and public opinion; the fundamental social institutions—the family, school and church; the political and economic institutions in their social

aspects; the problems of social welfare—poverty, crime, etc. The student is introduced gently to the social world, is made acquainted with the important social relations which prevail in the community and with the character of the culture which shapes personal and social relations. The whole is oriented to the present. While the historical setting is not neglected, it is subordinated to consideration of current problems and contemporary institutions.

The requirements for a good text book are ably fulfilled. The writing is clear, the language simple, the material carefully organized. Particularly commendable are the absence of dogma and cant and the effort to stimulate interest by means of suggestions for discussion and further investigation and lists of books for collateral reading and reference. Scattered aphorisms and epigrammatic observations enhance the value of the book. Not the least of these is the closing sentence, "Few sins are more despicable than the sin of willful ignorance."

IRVING J. KNAPP.

The Evolving Common School. By HENRY C. MORRISON. 52 pp. $1.00. Harvard University Press, Cambridge. 1933.

This is the 1933 Inglis lecture in secondary education. The author points out clearly the educational consequences of changes in American society of the past generation, and the structural maladaptations in the school system which have occurred in relation to these changes in society. He points out that due to increasing technological unemployment, it will be necessary to raise high school attendance to saturation point. The presence of finance will, however " . . . force the coalescence of the several parts of the system into a single school with an entirely new kind of structure." This, he points out, will only be going back to the old common school in which education was continuous and not broken up into discontinuous periods as is largely the case in our present educational system. This change, the author holds, will necessitate a new definition of the secondary school and a simplification and clarification of the curriculum. Particularly we will need to give, " . . . prolonged teaching in the structure and functions of society itself, in American civil institutions and the fundamentals of sociology and economics," subjects which are now largely neglected. Thus, we will be going back to the old common school not only in structure but in purpose and function.

J. ALLEN HICKS,
New York State College for Teachers.

Tribunes of the People. By RAYMOND MOLEY, Professor of Public Law in Columbia University. Yale University Press. 272 pages. Price $2.50. New Haven, Conn. 1932.

This book, based in part on the Seabury investigation in New York City, is written by Raymond Moley, professor of public law in Columbia University and advisor to President Roosevelt.

The book contains a discouraging and disturbing picture of the Magistrates' Court of New York City, both on account of the personnel of the courts and on account of the system. The magistrates, political appointees for the most part, were of relatively high order during the terms of Mayor Gaynor and of Mayor John Puroy Mitchell and kept these courts at a more satisfactory standard for ten years after Mayor Mitchell's death than obtained during subsequent administrations. The system in itself is at fault, as the courts are confused and crowded and cases are disposed of hastily. The vice squad, engaged in the suppression of prostitution and sponsored by a committee of fourteen, came in close contact with the magistrates' court and is shown to have engaged in highly reprehensible practices, consisting of what was practically blackmail at times and in fleecing women of their bank accounts through bondsmen and lawyers. One unfortunate woman was several times defrauded. The system of bailing and bondsmen apparently lends itself to great abuse.

The book is the report of investigations, and investigations seldom dwell on the virtues of the activities investigated. Probably much valuable service has been rendered by these courts despite their political control and the abuses cited. However they appear to be expensive, and badly organized and generally unsatisfactory.

Even probation, as it touches these courts, has been ineffective, chiefly because of inefficient personnel, but these conclusions in no way condemn probation as a whole. The book, in an interesting way, gives a picture of the difficult problems, the reprehensible practices and the possible solution of some of the problems seen in these tribunes of the people.

BROWN.

Prison Days and Nights. By VICTOR F. NELSON. 282 pages. Little Brown & Company, Boston. 1933.

This is a stirring human document written by a man who has spent the majority of his time since 1913 in schools for delinquents, reformatories and prisons. The author has a wealth of experience on which to base his book. One feels that he has a penetrating understanding of prisoners, their

lives and feelings both in the prison and the free world. He shows a certain detachment in writing the book in spite of his seathing comments regarding many aspects of prison life.

The sordid monotony of prison life, the general low level of talk (for prisoners lose the ability to carry on conversations because they must listen and cannot talk), the hatred, resentfulness, bitterness and emptiness of their days and nights is vividly shown in the chapters "Remembered Conversations."

The author makes the point that the prisoner in order to shorten his sentence or have hopes of parole, must adjust to prison life. This means he must show docile obedience to all commands and rules regardless of their absurdity. Ideas and initiative must be concealed—in other words, the very qualities essential to adjustment in the free world must be subdued in prison life. Furthermore, if one will get along with his fellow prisoners, a completely antisocial attitude must be cultivated. This attitude will not be changed over night when the prisoner is paroled.

In giving the attitude and point of view of the prisoner toward his incarceration, Mr. Nelson neglects to indicate what he thinks of existing educational and recreational opportunities. The complete lack of vocational training is dwelt upon but no comment is made regarding the various academic opportunities of which he himself must have taken advantage. The author says no effort was made to reform him in all the years he served. One wonders just what he means by this, for he was given educational opportunities through which it was hoped he could develop a more satisfying life.

The author's closing chapter is "The Prisoner Speaks to the Psychiatrist." In this he indicates some of the obvious difficulties of the psychiatrist in establishing contact with the prisoner and making an examination and he regrets the lack of anything but diagnosis and classification resulting from this. His closing sentence is "When are they (meaning the psychiatrists going to do anything for us?"

One feels after reading this book that all the prison offers is a limited protection to society by restraining certain individuals and that any man who has spent any length of time in a correctional institution has been subjected to experiences which have caused both mental and physical deterioration—not a cheerful picture.

The book is one which will be widely read and may be an instrument in the spread of a much-needed understanding interest in the criminal.

HESTER B. CRUTCHER.

The Youngest of the Family. By JOSEPH GARLAND, M. D. 188 pages. Price $2.00. Harvard University Press, Cambridge, Mass. 1932.

Since "bearing of a child does not by any means carry with it, as if by divine inspiration, the knowledge of the care of that child or any intuitive judgment as to what may or may not be best for him," Dr. Garland, a pediatrician of the Massachusetts General Hospital and Harvard Medical School, has written in very simple form a handbook suitable for the education of the average parent who wishes to know what may be expected in the way of normal development in her child, how to care for him properly, and how to meet the little emergencies which may arise. He discusses such simple things as the best way to bathe, dress and feed the child, stressing the importance of the parent-child relationship in such care. He explains what may be expected in the way of normal physical and mental development at the various age levels. Chapters are devoted to the breast fed baby, the bottle fed baby, and to the premature infant. Some general health principles are stressed; protection against infection, particularly the common cold; the importance of enlarged and infected tonsils and adenoids, evidence of and prevention of rickets, tetany, scurvy; prevention of diphtheria by toxin-antitoxin. He touches upon the minor ailments: regurgitation and vomiting, diarrhea, constipation, colic, hiccough, worms, croup, rashes, infections, convulsions, etc. And the last chapter is devoted to the clothing, play life, rest and food of the runabout child, along with a few suggestions for the proper habit training and the discipline of the child.

This book is recommended particularly for parents, but might also be of help to the psychiatrist who needs to know more of the natural development of the normal infant.

RENA M. BIGALOW.

Amateur Nurse. By MARY WRIGHT WHEELER, R. N. 234 pages. Price $2.00. The Bobbs Merrill Co., Indianapolis.

This is a well-organized book. The clear print on dull paper makes it one which can be read without unusual eye-strain. The sequence in which the chapters are arranged is such that the reader's interest is held throughout.

The writer has considered every age of individual, from the infant to the aged, and deals with the possible diseases of the age, thus making the book most comprehensive.

The material is presented in language which is readily interpreted by the lay person. The nursing procedures are practical and could be easily carried out in the home.

In the chapter on "Tempting the Ailing Appetite," the recipes are especially good.

In various parts of the book the change in size of the print catches the reader's eye and give the impression that the topic being then discussed is of particular importance.

The heading of each paragragh, the detailed sub-headings of the chapter contents make this book one which can be readily used as a reference with great economy of time.

The glossary, appended at the back of book, insures the proper interpretation of terms used throughout the volume.

In the bibliography, the writer has recommended a number of authoritative books on the branch of nursing discussed in each chapter. This is commendable, so that any reader interested in further study of a particular phase of nursing care will know where to procure such books.

Any wife or mother possessing "Amateur Nurse" would feel that she had an invaluable aid when problems of illnesses come up in the home. The book is recommended as one which would be most helpful to the untrained and inexperienced person having to nurse the ill.

HELEN E. BEEHLER, R. N.

Annual Report. The Commonwealth Fund, New York City.

The 1932 Annual Report of the Commonwealth Fund reporting as it does the wide activities of this philanthropic enterprise not only in this country but abroad, indicates the wise provisions of its directors in allocating expenditure of something over a million and a half dollars during the year. The expenditures were devoted to encouraging rural health work in certain districts, in establishing rural hospitals, in financing graduate students from the British Empire in American universities, and in acting in an advisory way for child guidance clinics, including operating the Institute for Child Guidance in New York, the latter being chiefly a teaching activity.

Mental health has been a large part of the program of this fund for the past ten years, particularly in child guidance. Methods and standards have been developed and an expansion of child guidance clinics has taken place in many districts throughout the United States and to some extent in Great Britain as a result. This fund has to an appreciable extent done for mental health what the Rockefeller Foundation and the Carnegie Fund have done in physical health and education respectively. Publications by the fund include child guidance clinics, a directory of psychiatric clinics in the United States. "The School and Mental Health," "Child Health in the Community" and a somewhat monumental undertaking edited by Dr. H. B. Logie, "A Standard Classified Nomenclature of Disease."

BROWN.

Character in Human Relations. By HUGH HARTSHORNE. 367 pages. Charles Scribner's Sons, New York and London.

In his first chapter the author states "We do not yet know how to develop in others the fundamental personal attitudes that issue naturally in moral leadership: there is no bag of tricks for turning a course of study or a student activity into a character forming experience—."

Facing these limitations the author has enumerated in the first part of the book the types of methods now used to influence behavior and character, such as discipline, ceremony, exhortation, play, counselling and mental hygiene. The modes of organization and the existing programs for the inculcation of desirable character traits are mentioned in this connection.

In Part II, the author discusses the theories of character such as the trait concept, various habit theories regarding character, etc.

In Part III, the author takes up the question of human behavior and its reconstruction. He says that "to learn is to act, hence teaching is that which makes provision for creative purposeful activity." This activity must then be directed toward the highest and most enduring satisfactions. He considers ways and conditions of learning, propounds his theory of character formation with special reference to the biological and social concomitants of character.

In Part IV, Dr. Hartshorne discusses methods and organization for the development of character. It is here that the author is at his best. His discussion of what the school could accomplish were it, "continuous with the life of society" is interesting. His evaluation of the ethical value of social projects both in school and out is dynamic in concept.

Unfortunately the author is not able to solve the problem of how to arrange situations in which a child grows up in such a way as "to permit him to function with increasing completeness in the life of the world" but he has given an interesting summary of conceptions of character and how it is developed and what we need to know to develop "a way of behaving which takes into consideration the far-reaching implications and consequences of actions, deriving joy and confidence from successful and meaningful participation in all the relationships of life."

HESTER B. CRUTCHER.

Sweeping the Cobwebs. By LILLIEN J. MARTIN and CLARE DEGRUCHY. 281 pages. The Macmillan Company, New York.

In this volume the authors describe the methods they use in the handling of the psychological problems of old age. It is a presentation essentially for the lay public.

In Part I, the authors describe what they do for the patient, such as, at

the first consultation when the individual problem is presented, and a brief mental test given, namely, 10 questions from a standardized intelligence test and Fernald's ethics test. These two are considered as having a two-fold purpose. "First, in revealing to the consulter, the present state of his mental functioning, at which he is generally surprised. Second, the therapeutic value that lies in the recognition of how far he has allowed deterioration of his mental processes to advance, and awakening a desire in him for the restoration." The approach to the problem then consists of outlining a daily program of activity, both physical and mental. This consists of a budget of behavior. The budget idea is also extended to include finances. By such attention to conservation of behavior, time and money, much of the anxiety is apparently relieved. Instructive suggestions are then offered, in a re-orientation of desires and wishes in the light of such capacities.

Part II discusses the psychotherapy used. It outlines a chart of rehabilitation exercises, dealing with 19 points, covering all activities. A daily chart for the individual to check his performances is provided. This part also discusses the 19 points in detail, and includes many philosophical comments of a rather superficial type. Of peculiar interest, at least to this reviewer, was the authors' note on slogans and their value in "training muscles independently of the will," as well as the offered suggestion that slogan production, by means of a victrola, might be beneficial to the "senile inmates of insane hospitals."

Part III discusses the reclamation of older workers in industry. The authors found several causes as to failure. First, anxiety states, due to the realization on the part of the individuals that their ability to handle their work was gradually lessening. Second, the realization that they were approaching the age zone when they would be laid off and they were not sufficiently prepared financially to care for themselves without a position. Other causes of failure were found to be, in some employees, a persistence of habit pattern; they at one time were competent to the position, but with changing demands, the individual was unable to readjust and had continued his old habits. Another factor was the intensification of individual personal characteristics by advancing years, which showed in irritability toward customers and other employees, and resentment between employee and employer. The authors tell how they approach these problems, describe briefly what they did, and report the results in some individual cases in which their advice as to correct mental and physical habits resulted in improvement in working capacity.

As stated, the book is essentially for the lay public, but it might have some value to the psychiatrist as, reading matter that may be suggested to patients of advancing years. It would be mildly supplementary to the more particular medical advice and treatment.

H. BECKETT LANG.

Open and Shut. By EDWARD SEFTON PORTER. 246 pages. The Christopher Publishing House, Boston.

This is a novel which will probably serve to interest the general public more widely in the crime question. The author was formerly an assistant to the deputy chief probation officer in the Court of General Sessions, New York City. We would judge from this that he knows much of the methods of the police both in detecting and convicting criminals. He describes these methods too vividly for the comfort of the casual reader. The attitudes of those who come in conflict with the law is portrayed with apparent understanding.

It is an interesting book and easy reading in spite of the fact that some portions are written in the vernacular of the New York City police.

HESTER B. CRUTCHER.

Our Children: A Handbook for Parents. Edited by Dorothy Canfield Fisher and Sidonie Matsner Gruenberg. Prepared and sponsored by the Child Study Association of America. Price $2.75. The Viking Press, New York, 1932.

This book contains two excellent introductions by its editors, the first by Dorothy Canfield Fisher, who relates her troubles as a pioneer in the field of scientific child training, and the second by Sidonie Matsner Gruenberg, who describes the present concept of parent education. Mrs. Gruenberg explains that this volume has grown in response to questions received by the Child Study Association of America—questions which are found to need more study and amplification than a single direct reply.

The problems fall under four general headings: The child's growth and development, the home, the school and the outside world. These questions are dealt with by such experts as Dr. Arnold Gesell, Paul Popenoe, John E. Anderson, Jeanette Regensburg, Dr. Adolf Meyer, Dr. Bernard Glueck, Ernest R. Groves, E. C. Lindeman and 19 others. Each group of articles is prefaced by a list of questions which prompted the writing of the several chapters in that section.

In addition to the variety of viewpoints afforded by the number of different authors, there is an excellent bibliography for each chapter. This book should be a worthwhile addition to the resources of parents or any group or individual interested in child study and development.

ELIZABETH S. THOMPSON.

Hollow Folk. By MANDEL SHERMAN and THOMAS R. HENRY. 215 pages. 1933. Thomas Y. Crowell Company, New York.

This is an interesting account of five Blue Ridge Mountain communities of five distinct levels of culture, lying on the opposite side of the mountain from the community discovered by Herbert Hoover, and supplied with a school by him. The communities are lost in inaccessible hollows about and over which civilization flows, leaving them unnoticed and untouched except for occasional summer hikers from a nearby resort.

Beginning with Calvin Hollow at the top of the mountain, one finds in each successive hollow a step upward toward the civilization of the lowlands. Briarsville, at the foot of the mountain, has its churches, schools, morals, organized work, competition, and contact with people of other communities. Up in Calvin Hollow is total illiteracy, no regular means of supplying food and clothes, few desires, no ambitions, a meagre language, and a mass of superstitions retained in imperfect and unembellished form from Irish ancestors. There is no appreciation of a need for religion, education, any form of sanitation or medical assistance, no conception of working or playing in groups. This is coupled with a sense of helplessness and a belief in fatality. A woman expects to "have her number" (of children). If a child dies, the mother says, "hit was meant that way." They believe a man will not die until he has lived his numbered days. They not only do not expend energy to help themselves, but wish those who help them, to pay them for this privilege. A man told a doctor a pitiful story about his crippled child, and when the doctor had struggled through the rugged way behind the man to the cabin, he was met with a demand for a dollar for guiding services.

The other "hollows" in turn show development in accordance with their distance down the mountain which determines their degree of isolation.

ALICE W. GODDARD.

Self-Consciousness and Its Treatment. By Dr. A. A. ROBACK. $1.50. Sci-Art Publishers, Harvard Square, Cambridge, Mass.

The reviewer had the pleasure and profit of analyzing "Personality" for THE PSYCHIATRIC QUARTERLY of July, 1931, and, curiously enough, including a bibliography and questionnaire, the present volume contains but three pages less of reading matter.

The brief foreword states the book has been prepared for the members of the Society for Adult Education, but it might as easily have been written for the Parent-Teachers' Association, or some like body, since there are no

highly technical expressions to confuse the average reader. An unusual feature is the indenting of topical notes in many of the paragraphs, printed in heavy type, so one can easily check up as he goes along, or refresh his memory on any point by rapid back tracking. Then too, the book is not formally divided into chapters, Roman numerals being used to separate the various changes in context.

At the very outset the author reveals his practical turn of mind by dismissing, almost immediately, the philosophical aspects and disputes, "between the 'I' and the states of 'Me' * * * this approach * * * is purely abstract, speculative and even metaphysical, and need not detain us for another instant."

Ego-consciousness must not be confused with self-consciousness, which is popularly thought of as denoting, "preoccupation with one's own personality to such an extent as to suppose that one is the object of observation by others." While the first is a species of self-consciousness it refers to one's regard for self or self-satisfaction and is, therefore, a less desirable social trait, though tending to aid its possessor in attaining his mark in the world, since it connotes aggressiveness.

Self-consciousness, on the other hand, if emphasis is placed by its owner on the phrase "the object of observation by others," may lead to all manner of faults through submissiveness, a feeling of inferiority and worse, positive paranoic trends.

Naming a few chapter headings gives one quite an insight into the author's method of handling his subject. After the introduction and history of the development of the word and what it connotes and tracing it through philosophy, literature and the arts, he asks: "What Happens in Self-Consciousness"; "What Sort of People Are Self-Conscious"; "What Are the Causes" He then gives some "Dynamic Theories of Self-Consciousness" and shows "The Handicaps in Daily Life;" concluding with, "The Treatment," and, "Experimental Psychology of Self-Consciousness."

Self-consciousness may be acute or chronic, the former akin to emotion, the latter an attitude which may turn into an emotion. It manifests itself in objective symptoms, indicating the possibility of a disturbance of the sympathetic nervous system, or an endocrine imbalance.

It does not necessarily follow that one troubled with self-consciousness lacks confidence in himself, yet he does lack the "tough hide" of the extrovert. There are all shades and gradations, from the normal in the adolescent, to the morbid, which may end in the neurotic or psychotic, when it materially interferes with one's conduct or capacity to produce.

To quote one of his indented headlines, "Self-consciousness may be a lack

of will, and poor emotional tone;'' here we find him saying, ''Lack of self-consciousness is not in reality an inner confession of intellectual insufficiency. Quite often it is a self-reproach at not having been able to accomplish something worth while with the brains at one's disposal.'' ''People who underestimate their own ability are as a rule apathetic * * * lack initiative * * * justify their indifference * * * by repeatedly telling themselves and others that their self-assurance is at an ebb. Yet * * * they can work up an astonishingly violent temper, which is a clear indication * * * their psychic energy is not rationally divided.''

From the chapter on ''Treatment'' we abstract these thoughts, ''The person who gains in worldly wisdom, who begins to take an intelligent interest in the welfare of his fellow-beings, will be surprised to find how much of his self-consciousness has disappeared,'' and this, ''The self--conscious man thinks that he is so important that, in the first place, is the cynosure of all eyes, and secondly, that his person must not be taken in vain by the slightest criticism. After he loses his somewhat distorted view (under treatment) he gets rid of a large dose of his self-consciousness.''

The question of smoking, as a means of releasing the tension provoking self-consciousness, is dealt with on page 97, but the author does not necessarily advise one to take advantage of certain radio suggestions, ''Be nonchalant, smoke a ———,'' in this way ridding oneself of self-consciousness.

The book is easy to read and can be finished in one session but you will find it contains sufficient thought arousing statements to cause you to consult it frequently when the indented topical headlines will be found most useful. The book is a little too wide to go into an ordinary pocket, but it is small enough to find a place near one's favorite study chair and is to be recommended to all interested in sociology, psychology and psychiatry and fits in well with the others of the author's series of essays.

Beyond the reading matter and bibliography is a hundred questions which will probably convince anyone that he has or has not read the text understandingly.

GRAY.

Growth and Development of the Child. Part II. Anatomy and Physiology (Publication of the White House Conference). 629 pages. Century Company, New York City, 1933.

This volume, dealing with the physiology and anatomy of the child, is the second of a series of four volumes devoted to the consideration of the growth and development of the child which emanated from the White House Conference on Child Health and Protection. The volume is not de-

voted to a detailed discussion of either anatomy or physiology nor is that its purpose. It deals, in a rather sketchy manner, with the various systems of the body. It touches upon the high spots of what is known about them anatomically and physiologically, indicating the quality of the data now available and the gaps in our knowledge which it would be important to fill, or which are already the subject of special investigation.

Although the various systems were reported upon by specially appointed committees and each report was discussed at the general conference of the various committees before it was accepted for final publication, still, one readily senses a difference in the manner in which different systems have been treated. Some are more energetic than others in correlating the anatomical and physiological data and pointing to ways and means for extending such correlations and applying the information to the problems of medicine.

One will undoubtedly find important and interesting data collected in this volume regarding the child but its chief value will lie rather in pointing out the rich possibilities which may result from carefully planned and correlated investigations. In this connection, it is of interest to mention some of the remarks in the introduction by Blackfan, chairman of the Committee on Growth and Development. Since some of the problems must depend upon statistical methods for their solution he says, "we must remember that results arrived at by statistical methods are no sounder than the original data themselves. The original observations must mean what they purport to mean, and must be obtained under known conditions, if the conclusions drawn from them are to be valid. Furthermore, although statistical analysis may show a relationship between two variables, it does not tell which is cause and which is effect, or even whether there is any direct causal relation whatever between them. In the evaluation of the work in certain fields, the committee has often found that investigations are of no value because of failure to recognize such limitations." "We must here emphasize the point that uncritical use of statistical methods involves a real danger because of the false impression of authority given by results mathematically expressed. Its misuse may even go so far as to bring the method into disrepute." It is interesting to note that the committee has found that although there are extensive statistical data regarding race, locality and economics, still these data are wholely inadequate for determining their influence upon the growth and development of children. The book may be well recommended to arouse thought and investigation in problems regarding the child and to stimulate a discriminate use of the knowledge at present available.

MEYER M. HARRIS.

An Experiment in Recreation with the Mentally Retarded. By BERTHA SCHLOTTER and MARGARET SVENDSEN. 75 pages. Behavior Research Fund, Chicago.

This monograph describes in appropriate detail an experiment in planned recreation conducted among the enrolled population of the Lincoln (Illinois) State School and Colony. The term "recreation" is used here in its broadest sense to include various forms of entertainment, diversion and amusement although games of all sorts do play the most important rôle. Even though the program is arranged to meet the needs of an institution, the material presented would seem to be relatively valuable in developing a rereation program for backward children in other groups.

Many interesting and unique observations are recorded by the authors. For example, they found that retarded children respond approximately as do normal children of their own mental age. Singing games were especially popular in practically all groups except the older, high-grade boys. Mental age is apparently more important in classification than is life age although factors other than intelligence operate in some cases.

The latter part of the book is devoted to a very useful classification and analysis of various play activities. These are presented in five separate lists as follows: (1) alphabetical arrangement; (2) according to degree of complexity; (3) amount of motor activity involved; (4) special materials needed or no materials needed; (5) as regards social organization. The interesting question of penalties in games is carefully presented.

Some of the significant results of such a program are: mental and physical improvement, greater happiness and contentment, less destructiveness and irritability, and better government and discipline in the institution.

E. MARTZ.

The Interpretation of Dreams. S. FREUD. Third English Edition. Translated by A. A. Brill. The Macmillan Co., New York, 1933.

It seems almost incredible that a scientific contribution that has been subjected to intensive investigations for over three decades by a number of critical research workers should survive essentially unchanged from the original. It is all the more remarkable when the original contribution represents a radical departure from the usual way of thinking. Such is the history, however, of Freud's "The Interpretation of Dreams," a book that is regarded by those familiar with its contents as the masterpiece of Freud.

This new and revised edition and translation is admirably executed. It is obviously redundant to call attention to the ideas presented therein, for they have already been highly commended by many. The additional values

to the book center around factors concerned in careful editing and publishing. The translation is freer, easier and truer than that of the first English edition. The construction of chapter-headings, paragraphs and sentences is particularly noteworthy and the translator is to be congratulated for the minute care that he must have given to the translation.

Here and there the material of the book has been supplemented in the interest of clarity; certain paragraphs have been omitted; yet, the general content of thought has remained essentially unaltered; the terminology has been changed to conform with current terms, although even from this standpoint the departure from the original is not marked.

HINSIE.

L'Epilepsie chez l'Enfant et Le Caractere Epileptoide. By Dr. GILBERT-ROBIN. Collection des Actualités de Médicine Pratique. G. Doin et Cie., Paris, 1932.

This small pocket-size volume of 149 pages should be of interest to psychiatrists, psychologists and social workers specializing in child guidance. It is the fruit of the author's observations of nervous, retarded and unstable children. In the course of his study and treatment of these children, he observed many who showed mental characteristics similar to those of epileptics, though without the presence of seizures. After much reflection Dr. Gilbert-Robin came to the conclusion that there is an epileptoid syndrome, with definite traits other than the classic seizures. By recognizing these traits, it is possible to identify an epileptic individual in the early formative period of his disease and by proper treatment, avoid the subsequent deteriorating processes. The author does not claim radical cures, inasmuch as he considers the epileptoid character constitutional, and therefore permanent. But a hygienic regime may be instituted, which should be carefully followed throughout life.

The greater part of the book is devoted to the evidence of the existence of the epileptoid character and a description of the signs by which it may be identified—such as "bradypsychie' (slowness of thought), obnubilation, and disorders in writing. Among the mental disorders included in the epileptoid character are anger and anti-social reactions, obstinacy, opposition, turbulence, sleep disturbances, fugues, and thefts. The volume closes with a short chapter on treatment, and another on the guidance of epileptics, especially with respect to the pursuit of a vocation.

The book furnishes a simple and readable exposition of epilepsy which will possess utility, regardless of the general acceptance of the hypothesis of the epileptoid character.

MALZBERG.

Our Neurotic Age. A Consultation. Edited by Samuel D. Schmalhausen. Pp. XVII + 531. $4.00 net. Farrar & Rinehart, Inc., New York.

This is a symposium of articles by upwards of 30 writers, grouped under four general heads:

I. Is the Normal Mind Sane?
II. Beyond Normality.
III. The Social Background of Neurosis.
IV. Ecce Homo Sapiens!

So far as known to this reviewer, no satisfactory method exists of reviewing in brief space, the outgivings of so many minds on such a variety of topics. The common thread running through most of the articles ranges from mild criticism to virulent denunciation of the capitalistic and democratic social organization, and praise, pale pink to ruby red, of the beauties of communism. One is permitted to wonder if a few of the contributors had a complete realization of the company they were keeping.

The naiveté of the communistic enthusiast constitutes an intriguing psychological phenomenon. The taboos and restrictions of savage society are roundly denounced, with fine disregard of the fact that primitive culture was undoubtedly communistic in type, and the further fact that apparently modern communism still has to resort to the old inhibitions and repressions to make the system work. Individualism, democracy—these made possible the non-conformist attitude which our communist friends so freely express and evidently enjoy; yet they have no tolerance for non-conformists. Consistency is a quality not stressed by those who incline far to the left.

Perhaps a few random quotations will convey a better idea of the contents. The reviewer cannot refrain from making a few parenthetical comments.

"Never before in human history has homo sapiens felt so unsolved, dissolved, so completely in a state of irresolution." (How do we know it?)

"There is a remarkable increase within the past quarter of a century particularly in the psychoses of the 'dementia præcox' and 'manic-depressive' variety." (Obviously: Kraepelin's terminology has been accepted within that time.)

"Competitive capitalism breeds personal instability and social insanity. *** On the other hand, the culture of communism promises to minimize and even eliminate these psychoneurotic sources of human misery, creating ultimately a social world of a marvelously sane character." (Communism is full of promises.)

"The psychotic person is always a specialist."

"There are by far fewer sane people than intelligent people. Sanity requires intelligence and education, but there are millions possessing both intelligence and education who are nevertheless wrongheaded. ***Sanity is discovered in relatively few."

"The religious conscience is in the devoutly religious, a provocative factor for mental ill-being, and we feel it hard to believe that many examples could be adducted of really religious folk who were in the ordinary sense of the word, thoroughly and continuously well-balanced."

"Mind, no differently than body, is exposed to maladies of thought, occasionally to a collective epidemic."

"An entirely novel, unintelligible, attributistic jargon pervades reams of psychoanalytic literature." (Too true)

"To the educator and reformer, the indication will be helpful that the serious obstacle to better thinking is the hang-over of juvenility, even more than that three in five of our citizens must be content with modest I. Q.'s. (Reference to I. Q.'s probably quite true.)

"The current economic depression is demonstrating that *** hundreds of thousands of men, women and children, confronted with the need for adjusting to lowered standards of living, and for seeking both material and emotional security in unfamiliar byways, are nevertheless able, in the majority of cases, to adapt themselves with courage and wisdom." (Very true.)

"The state is presumably the protector of the public welfare; now even the simplest mind can see for itself that the state, in a capitalistic and exploitative system, is the most powerful foe of the public weal." (But the people are the state—therefore, the most powerful foe of the public weal.)

"The dirty failure of capitalism, its betrayal of humanity, the treason to truth and justice, its false rewards and securities, its fake sincerities, this is but part of the tragedy of modernity."

"Communism as a culture that integrates body, heart, and mind by means of a socialized therapy is itself the most fruitful of all the psychotherapeutic techniques." (Including mass deportations?)

"Just what might we expect in the way of psychological and moral benefits to our society if modern men and women dispensed with their shame and their clothes and associated freely in the costume of Eden before the fall? The answer is, inevitably, healthier minds, a saner attitude toward sex, and less sexual debauchery." (We might also expect an increase in the incidence of pneumonia.)

"To the alienist it is a commonplace that the cause (chronic continence resulting in a state of physiological castration) provides insane asylums with the great majority of their boarders. To the medical practitioner it provides the bulk of his income." (The author of these lines, strange to say, is a *physician*.)

"Americans have not yet realized their kinship with the new Puritans of Russia."

"Only in eras of political decadence is the individual likely to be what is called morally and mentally free."

"Speakeasies are full of mismated couples, maladjusted husbands and wives, sons and daughters suffering from parental fixations, psychological misfits of every kind."

(Discussing effects of prohibition.) "Lunatics are being prematurely released from insane asylums in order to make room for new inmates—often with tragic results." (Which, of course, is just not so.)

"The only question at issue is whether communism is an all-embracing practical philosophy so able to absorb the mind of man that any other idea contradicting it will seem savage, that is, beyond the pale of that which should be tacitly accepted by all."

"It is only upon those artists who ally themselves with the rise of the proletariat, and with the conception of a new classless civilization, that this pathology (of decaying civilization) will have little influence."

"What is needed is a clear-cut realization that the state is in form, method, aim and nature a racket, the effects of which are to raise one group above another by political means, and then to serve as the coercive and extortional tool by which the upper class maintains itself and exploits its fellows."

Four of the articles treat specially of mental hygiene problems: The Mind in the Breaking; Insane Complexes in Sane Minds; Problem Parents and Problem Children; and The Sadistic Side of the Law. Some of the quotations are from these articles, which in the main, are serious discussions worthy of consideration by those who are interested in mental hygiene, but have no flair for communism. Some of the other articles may be classed as liberal-conservative, but as a whole, the book is recommended to those who wish to take a peek at the world through red spectacles and to whom the resulting distortion is not especially disturbing.

FARRINGTON.

Influence of Social and Economic Factors on the Health of the School Child. School Health Research Monographs. Number IV. American Child Health Association, New York City.

Monograph IV of the School Health Study constitutes a further step of the American Child Health Association in evaluation and measurement of school health work. The first task of this child health study was to determine some biometric uniformity of approach in the form of tests to be used as a basis of evaluation of health practices. Monograph I offers an analysis and description of the tests used to measure the health habits, attitudes and knowledge of children. Monograph II deals with anthropometric characteristics and nutritional states. Monograph III concerns itself with measures of condition of teeth and their evaluation. The present Monograph IV tries to scrutinize the influence of social and economic factors in relation to the health of school children.

The monograph reviewed here, consists of seven individual chapters and three explanatory appendices. We learn that socio-economic forces influence nearly all health measures. Intelligence and race determine differences in certain groups with regard to knowledge, habit and attitude. Dental care is influenced by intellectual and economic status. The quality of home care and cultural status have their bearing on the care of the teeth, the type of musculature and the subcutaneous tissue of children.

Attempts are made to evaluate health achievements as an organized effort in schools apart from social stratum and economic status. The measures thus secured are called "residuals" and are visualized and expressed in statistical formulae in the appendix of the monograph. By means of algebraic expressions and equations an objective evaluation of health procedures becomes possible and can be constructively used in the health programs of schools.

The field technique of approach with regard to school health measures of socio-economic forces is explained as to its quantity and quality. Seven thousand five hundred public school children of the fifth and sixth grades in 70 schools, scattered over 38 states, were studied. The superintendents of the schools were given explicit instructions with regard to measures of socio-economic influences.

The investigation was made by a "squad" including representation from the fields of medicine, oral hygiene, health education and physical education. Investigation included: (1) Rent appraisal of the pupil's home. (2) Population of the city. (3) Cultural status due to nativity stock. (4) Cleanliness. (5) Age. (6) Grade. (7) Sex. (8) Intelligence.

School health tests in different localities were applied, tabulated, evalu-

ated, studied and compared. Tests used related to attitude, knowledge, nutritional status, conditions of teeth, corrective attention to defects of vision and hearing, effects of health conditions and health behavior such as presence of pediculosis and bitten nails.

In the last chapter of the monograph IV the authors stress and clear the "socio-economic residuals." They assert that "the correlation between economic status and school health results should be reduced as school health practice advances." The residuals obtained from the socio-economic relations are used as criteria for further analysis of results. It is postulated that relations of socio-economic measures to school health results express "democratic achievements of organized health effort."

The appendices of Monograph IV detail the measures as to the socio-economic influences and give directions as to the methods (A). Appendix B offers tables of "basic data" involved in the analysis. (Complete mimeo--graphed copies may be secured from the American Child Health Association, 450 Seventh Ave., New York City). Appendix C explains the statistical technique.

Monograph IV in its entity and in conjunction with its predecessors (Monographs I, II and III) is another stepping stone, paving the way to a clearer appreciation of school health procedures and an understanding of the factors to be considered in a school health program. The final results and consequent constructive plans are reserved for Monograph V of the study series.

It may be hoped that the study when completed will help in the promotion of the physical health of the school child. A similar study and a development of adequate criteria for the school child's mental health would, in my opinion, round out and complete a health study and make headway for an effective school health program of the future.

A. J. GOSLINE.

Crimes and Criminals. By WILLIAM A. WHITE, M. D. Farrar & Rinehart, 1933.

Dr. White has written this book not with intention to present new material, but to stress the importance of the total viewpoint which he offers. He says that in writing his field broadened into an essay upon human relations merely illustrated from the field of criminology. His starting point is in the thesis that any effort to control or direct man's activities and thoughts must fail unless based upon an adequate understanding of the development of man's psychological concepts and their dynamics. Law has always tended

to regard crime as an act, with too little regard for the actor and his motivations, even though there is no choice but to regard mental phenomena as meaningful and as being precisely determined by preceding factors. In clear and interesting fashion, the author presents the present-day concepts of the id, the ego ("that aspect of himself which the person knows"), and the super-ego, and traces their effects upon the individual and upon the growth of the social structure. He points out that there is an emotional genesis for the mental problems both of psychiatry and criminology. Describing the changing attitudes toward what were once delimited as sociologic, or as moralistic, or as punitive, or as pathologic problems, White portrays a gradual intermingling of our concepts upon all of these matters and the slow emergence of a more unified notion about them and about the possibilities of meeting and seeking to correct them. In a brief but forceful section on "Individuation--Regression—Heredity," and in the coloring of much of the book, the thesis is stressed that heredity and environment cannot be artificially separated as opposed, but are only varying aspects of a single situation. Heredity may be thought of as the laying down in structure of "environmental inclusions" and hence is but the organic response to environment. Often, too, there is a confusion based on the occurrence of mere imitation and identification. With the view that behavior is built up by an individuating rather than an additive process, the deterministic principle is urged—that back of the behavior attributed to a free will the real activating forces lie, for the most part, in unconscious factors. Therefore, it is absurd to continue as we have to take an attitude of punishing the criminal. The most inherent evils, cannibalism, incest and murder, are discussed and the great intensity of the tabu against them is thought to be due to the need for defending against similar tendencies within ourselves. As their manifestations have grown less through our cultural development, we have gradually come to adopt less stringent codes concerning offenders, and White points to the steadily spreading tendency to abandon capital punishment for murder, both by abolition of penalty and by leniency shown by juries. He shows how the community purges itself of its guilt feelings for having, even though unconsciously, the desires to do forbidden things; it is by projecting the guilt upon the individual transgressor and satisfying the need for self-punishment through sadistic treatment of the offender. This, the author thinks, is the explanation for the retributive system of punishment still meted out. He wishes to substitute a fairer view of crime as being simply conduct which has escaped the control of the individual or of society, as stamped into the super-ego patterns.

What is needed, then, is an attitude of remedying based on a clear un-

derstanding of the intricate details of the individual criminal's problems. The substitution of therapy to remove the obstacles and so to permit the personality to expand where frustration had worked, is slowly beginning to bring a new viewpoint into criminology. It must be seen that when frustration has driven the individual's energy to regress to earlier methods of utilization the earlier methods are out of touch with the times, and hence are socially objectionable. If now we add to this frustration the further one of the present system of deliberate thwarting and of stimulation of the hate instinct, we have certainly not helped society. "The everlasting meeting of aggression by counter-aggression is a losing process."

White argues for no longer hiding behind the theory of punishment, which is manifestly a failure. Rather he bespeaks the withdrawing of certain privileges which the individual's behavior showed he was incapable of using properly. Institutional confinement then would be for the removal of a disturbing influence from the social group and for the opportunity to the offender so to learn to modify those reaction patterns that he could return again to the group—or if that proved impossible, then to "continue his residence in the institution under as comfortable circumstances as possible with as large an opportunity for self-expression as could be safely and economically permitted." In place of expiating some past act, the offender should be helped to solve his problem by finding more socially acceptable avenues for his otherwise regressive urges, for in so doing the undesirable regression may be avoided.

A sufficient understanding of what the phenomena really mean, White thinks, would curb society's aggressive instincts toward the criminal, and only then can his problem be correctly dealt with. At present the law takes little interest in the wife, children, social claims, or immediate human relationships of a man found guilty of some antisocial act. What investment society has already placed in him should be a significant factor in the building of a program, so as to obtain the fullest possible return later upon that investment. It follows that much pains should be taken that properly trained officials be placed in charge of the work of administering justice and the penal law—a thing which has not thus far been done.

In conclusion there are comments upon the psychological problems of court-room procedure, the bias from public opinions, the personal equation in the jury room, and a number of similar issues, all of which lead the author to remark that "punishment from the outside nearly always is felt as unjust and instead of causing efforts at rehabilitation it activates antagonistic, aggressive tendencies." It is the punishment which comes from within which is just, and the rehabilitation which is worthwhile also has its standards within.

Reading the book, one moves gently along in what to many will be familiar territory. It is then surprising to realize when one has finished how much stimulation has been injected, how many new combinations of the material have led to effective and deeper insight into a vast subject—that of the mutual relationships between society and the individual who fails to meet its minimum requirements. It should be read by everyone interested in human relations, and might very well be placed upon the reading tables of our State legislatures.

GEORGE S. SPRAGUE.

Health and Environment. By EDGAR SYDENSTRICKER. 217 pages. Price $2.50. McGraw-Hill Book Company, Inc., New York and London, 1933.

This volume constitutes one of the series of monographs prepared for the President's Research Committee on Social Trends. As the title indicates, the author is concerned with the effect of certain environmental influences upon health. The concept of environment is developed broadly and philosophically, so as to include not only the usual geographic and economic aspects, but the less tangible though equally vital field of social tradition and social organization. Unfortunately it is not yet possible to express the latter in numerical language, and consequently the author is compelled to consider under environment only the usual categories of geographical distribution, urban and rural environment, economic status, and occupational environment. The evidence, much of which was originally prepared by the author and his associates in the United States Public Health Service and the Milbank Memorial Fund, is presented admirably and concisely.

Well marked associations are found between environment and health. Hookworm and goiter, for example, are found within certain geographical limitation. Rates of disease vary in urban and rural environments. Death rates and morbidity rates vary with occupation, and income. Some environmental factors such as the purity or impurity of water or milk are obviously related causally to disease. In other cases, as in the relative distribution, say, of tuberculosis, there is a complicated network of associated factors, making it difficult to say what is the relative contribution of any single factor to the death or disease rate. The author has clear ideas on the importance of the interrelations of health, heredity, and environment and takes great pains to point out the difficulties both of analysis and interpretation.

This book is an excellent contribution to the subject of health both as a statement of fact and as an analysis of the philosophy underlying the contemporary public health movement.

MALZBERG.

Sane Sex Life and Sane Sex Living. By H. W. LONG, M. D. 151 pages. Eugenic Publishing Company, Inc., New York City.

This is an interesting treatise on sex life in the marriage state which has already received much attention in Great Britain. It deals frankly with all phases of love-making and marriage relations.

In view of the prevailing ignorance in sex matters the book will be of great value to those who would love wisely and happily. It should promote both mental and physical health.

POLLOCK.

The Hygiene of Marriage. MILLARD S. EVERETT, Ph. D. 248 pages. The Vanguard Press. New York, 1932.

Professor Everett states that his purpose in writing this book was to give a brief and non-technical treatment, within a single volume, of all aspects of sex and marriage which are of concern to the public, but which are usually treated in separate and inaccessible works. He has succeeded admirably. "The Hygiene of Marriage" contains scientifically correct answers to all the layman's questions, and the text is clearly expressed and easy to understand. The author acknowledges the assistance of a number of physicians in preparing the medical sections of the book, and the chapters on anatomy, physiology and physical hygiene are very good, though one may question the statement that prevention of irritation of the genitalia usually does away with the possibility of infantile masturbation.

In a chapter on venereal diseases the author points out that moralizing has been useless in eliminating syphilis and gonorrhoea. He therefore advocates public education in regard to the nature, prevention and cure of these evils, and he outlines preventive measures. Subsequent chapters dealing with the mental hygiene of sex, abstinence, ideal marriage, marital hygiene and childbirth contain valuable material. In particular, the author's remarks on impotence, infantilism, pregnancy and labor are to be commended. The last chapters, comprising two-fifths of the whole book, are devoted to the topic of birth control. Professor Everett stresses the need for education in this respect, gives birth control laws and information about clinics, and discusses methods of contraception. The author has very definite views on this much discussed subject, and his championship of it, as well as of trial marriage, careers for women, tests for parenthood, and easy divorce will undoubtedly be the subject of controversy, though the convictions are stated in a calm, objective and rational manner.

The reviewer feels that this volume fills a need, and can be thoroughly recommended to the adult layman.

REGINALD R. STEEN.

Time to Live. By GOVE HAMBIDGE. 144 pages. Price $1.50. Whittlesey House, McGraw-Hill Book Company, Inc., New York and London.

The charm of the simple life is again brought to our attention by a delightful little volume written by a man who is experiencing the joys of the type of living he extols.

The good life, according to the author is to be sought in the country in a modest cottage with an acre or two of land so planted that it would yield throughout the season an abundance of vegetables, fruits and flowers. In addition there would be shade and ornamental trees and space for outdoor games.

In the author's experiment he started with a bare hilltop, and without the employment of experts, built and planted until, with the help of nature, a garden and grounds of service and beauty were developed. At first he had no control of his time, as he worked in the city; but later his work was done at home and he found time to enjoy to the full the place he had prepared for complete living.

The value of this type of life is told in a series of engaging chapters with the following titles: Time and the Body; Time and the Mind; Time and the Heart, and Time the Tyrant. In reading these chapters one is impressed with the superiority from the standpoint of mental and physical hygiene of the author's ideal over the ordinary existence of middle-class citizens.

Many people cannot find time to really live, but those who can, will find Mr. Hambidge's story of his successful undertaking full of suggestions they may use with profit.

POLLOCK.

The Human Personality. By LOUIS BERG. 309 pages. Price $3.00. Prentice-Hall, Inc., New York, 1933.

This volume prepared for lay consumption strives to present a complete orientation to the vexed problem of the human personality. Rightly enough the author discusses the interaction of the many factors involved, with a brief exposition of the various fields concerned, as applied to man. Thus he co-relates the forces of heredity, anatomy, physiology, endocrinology, environment, mental mechanisms and psychopathology. A new viewpoint is provided thereby, and Dr. Berg justly pleads for less specialization in the study of the human personality, remarking that the former fusion of all sciences in the mother science, philosophy—presented a sounder working basis. Appropriately enough, the old question is answered thus: "Heredity describes the circle within which the individual must work his wonders;

and environment attempts to square this circle." However, the writer is rather unfortunate in his editor's introduction which states in substance that the psychologist and psychiatrist represent the view that personality is conditioned primarily by inherited factors! Further the difficulties ever-inherent in the presentation to a lay audience of anatomical material, entrap the author in several errors, including his statement, for instance, as to the extent of the spinal cord. The writer's thesis (as reported on the book jacket) is that "Personality and character are reflected in human response as a result of conflict in a broad and universal sense."

The present knowledge and future promise of, endocrinology is well but conservatively evaluated, and the mechanisms of maladjustment, with particular reference to childhood, well-delineated. One can applaud Dr. Berg's observations to the effect; that "we should really say problem *parents*"; that one day "we will write a 'bill of psychological rights' for the child"; and that "At present most elders' love for their children is the ultimate in narcissistic worship." This reviewer found the sections relating to psychosexual development, the problem of sex, dreams, crime and punishment, and the exposition of the principle of "significant fictions," apt. Certainly his emphasis upon the predominant factor of the reaction of the given personality to the organic process—a subject which Dr. Berg has himself investigated—is a well-taken point. One may however challenge his reference to a "slight attack" of chronic encephalitis lethargica, and his exposition of the underlying pathology of that disorder. Further, as judged by the case quoted, the diagnosis; traumatic encephalopathy, would seem preferable in the discussion of the traumatic psychoses. In reference to the prognosis of melancholia, the statement on page 254: "And the remaining eight or ten per cent become dementia præcox patients, due to a hardening of the arteries of the brain," needs no comment. The author's views on organically determined homosexuality, the sterilization of the feebleminded, the definite attack of depression underlying all apparently normal suicides, and the advocated moderate use of alcohol by introverts—are each moot points. Ernest Jones goes further than the writer in deriving the origin of the "angst," as seen in anxiety dreams, and pathological anxiety. The book closes with an excellent chapter on mental hygiene and healing.

The text is copiously supplied with illustrative case material and an inclusive index is appended.

The chief virtue of the book lies in the presentation of a composite viewpoint of the human personality. Accordingly the reviewer commends it to the psychiatrist, physician, social worker, and the psychiatrically-minded cleric or educator.

NEWTON J. T. BIGELOW, M. D.

The Medical Secretary. By MINNIE G. MORSE. Cloth, pp. 162. New York. The Macmillan Co., 1933. Price $1.50.

The author, having had experience as a medical secretary and on the executive staff of a general hospital, is well qualified to act as guide and advisor to young medical secretaries. The book treats not only of the technical parts of a secretary's duties as filing, indexing, case record keeping, preparation of medical manuscripts and proof-reading, but gives much useful information and advice besides. The author's remarks on the ethics of the physician's office are especially good as is the chapter on the personality of the medical secretary.

It is heartening to see that modern psychiatric conceptions are permeating into circles where until recently they were never held. She recognizes, for instance, that a large proportion of the patients who come to the doctor's office have ailments which are more mental than physical, but warns the office assistant not to withhold sympathy from them on this account for disorders of the personality need help even more than bodily affections and their cure or alleviation is the greatest service that can be rendered.

HUTCHINGS.

Carrying the Mail; a Second Grade's Experiences. AVAH W. HUGHES. Bureau of Publication, Teacher's College, Columbia University. New York City, 1933. 253 pages.

This little book reports one of the Lincoln School Curriculum Studies. The author gives a detailed picture of the second grade program at the Lincoln School, showing how the very elastic schedule, under a good teacher, will foster self-expression, confidence and responsibility in the children, from the satisfactory carrying out of self-initiated activities. The tentative time table is interesting. With the exception of one morning when the first period is given to cooking, the children spend the hour from 9 to 10 in activities with materials of their own choice. The teacher does not plan for the class, but merely observes and when necessary explains and demonstrates techniques in the use of tools and materials. Individual help and suggestions are given as the need arises. During the period social interplay between the children contributes to the development of desirable modes of work and play. After the activity the children put away all work and tools neatly, the teacher seeing that every child cooperates without waste of time. The teacher uses the half-hour discussion which follows the activities, to direct and stimulate the interests and plans of the group, to impart information, to set goals and to develop oral expression in the children. A rec-

ord is kept of each child's use of the activity period, summarizing attitudes and habits of work. These charts enable the teacher to see that each child has an opportunity to use all kinds of materials during the year, and that some improvement in skill and effort is developed.

Most of the book is devoted to a detailed description of the year's activities which grew out of the children's interest in the mail. To Miss Hughes' excellent generalship this provided a means of broadening and deepening the children's interest in modern transportation, historical perspective, sciences, the language arts, reading and even arithmetic. With increased interest through story-telling, planning, seeing and doing, knowledge was the more easily gained, the children trying to learn, not because they had to, but because "it was fun." One is struck by the informality of the program, and the well-rounded year's work developed under the skillful hand and eye of Miss Hughes, but one shudders to think of the possible results had such a plan been undertaken by one lacking her capability. It would seem that success with these newer educational methods depends entirely on the personality, skill and aptitude of the teacher, and consistent efforts will have to be made to see that only the right type is entrusted with the important work.

The book is attractively bound, well printed and illustrated. While it is mainly for those actively engaged in teaching, it will interest anyone who desires to know more of the newer methods of education.

PATRICIA STEEN.

An Elementary Psychology of the Abnormal. By W. B. PILLSBURY. 375 pages. McGraw-Hill Book Co., Inc., New York.

"The purpose of this book is to give the layman and the college student an account of the aspects of the abnormal mental life that are likely to affect or interest them."

"Equally prominent is the aim of showing how the abnormal phenomena are related to the normal."

In his opening chapter the author emphasizes the fact that "the problem of the abnormal individual has never received so much attention as during the present generation," and asserts that "although the preoccupation of youth with the abnormal is to be deprecated, the very fact that complexes come out of the mouth of babes and sucklings to the advantage of neither the babes nor the community, is an indication of the widespread effect of recent theories and what were intended to be scientific discussions." The remainder of the chapter is devoted to a resume of abnormal psychological

characteristics with a concise delineation of the normal's similarity, recognizing the composite character of abnormal deviations. The neuroses and the psychoses are briefly defined and the author then addresses himself particularly to teachers, physicians, lawyers and clergymen as potent sources of "enlightened sympathetic advice," which may "turn the tide and straighten out an individual's problems in a way to cause much temporary relief and at the same time act as a preventative of later trouble."

The subject material of the book is presented in an interesting fashion and follows "the historical development of the modern theories of the abnormal." The treatise is well supported with case history material which, together with an occasional illustration, serves to make the work entirely readable.

Earlier chapters describe the romances of Gasner, Mesmer and the more scientific Braid, and there follows a discussion of the theories of the Nancy and Charcot Schools. Hysteria by Janet is considered in a subsequent chapter following which the Freudian theories receive an unbiased presentation and are subjected to a concise critique which leaves Freud a historical but slightly hysterical figure.

One hundred pages are allotted to the neuroses and their theoretical interpretation. Dissociated personalities, sleep in relation to abnormal phenomena, sex and mental pathology and speech disturbances are given separate consideration. There is also an excellent chapter on the so-called war neuroses. The remainder of the book is concerned with the psychoses, or as the author prefers to say "insanity" and its causes. Feeblemindedness, genius and insanity, and mental hygiene constitute the closing chapters.

The author is to be congratulated on the immense amount of information that has been incorporated in an "elementary" work of this type. The bibliography is indicative of the many sources of information that have been tapped over a long period of years. The material is presented in an easily read fashion and the chapter subheadings together with an excellent index permit of easy reference.

One feels the atmosphere of the lecture room and the professor's rostrum and wonders if the large amount of available material has not accomplished a more comprehensive work than the title suggests. It is difficult, for instance, to correlate the diagnosis of paranoia and its treatment with the elementary abnormal psychology. The author shows a tendency to draw conclusions and arrive at decisions a bit remote from the field of discussion and although he says regarding Freud's theory, that it is "to be tested by its appeal to the judgment of the reader," one feels that the basis of comparison is somewhat fixed and might be qualified by "In hoc signum vincimus."

In his treatment of the "insanities" the author shows evident lack of familiarity with the subject matter, and appears to have summarized the most dramatic symptomatology from the standard texts of earlier vintage. We are led to believe that "paresis is always fatal" and that although "occasionally recovery has been reported, the mass of authoritative opinion is that in these cases a mistake in diagnosis was made." There is no evident lack of willingness to discuss at some length the prognosis and treatment of "insanity" but it would seem that the application of psychology as a means of interpretation or treatment has been given secondary consideration in the exploration of unfamiliar pastures.

For the group to whom the book is addressed, much of the information contained in its later chapters, is misleading and unjustified. Had the work remained within the province of its title the quality of the material and the unquestionable ability of the author would have been of undoubted appeal. The author shows evidence of unfamiliarity with the more recent contributions to psychiatry.

O. A. KILPATRICK.

Les Malades de L'esprit et Leurs Medicins Du XVIe au XIXe Siecle. Les etapes des connaisances psychiatriques de la Renaissance a Pinel. By M. LAIGNEL-LAVASTINE and JEAN VINCHON. Editions Médicales. Norbert Maloine. Paris, 1930.

Those interested in French contributions to medicine will not have failed to remark the growing number of contributions to the history of psychiatry which have appeared in recent years. Professor Laignel-Lavastine and Jean Vinchon have been particularly devoted to this field, and in the present volume have presented us with an admirable critical exposition of the masters of psychiatry in the 16th, 17th and 18th centuries. It is a good sign to see such interest in the historic aspects of a science, for the cultural values inherent in such knowledge is a firm foundation for a better and deeper understanding of the subject.

The authors give us a clear statement of the value of the historical approach.

"The objectivity of psychiatry does not reside merely in the study of the ailing body, as is the case in current medicine. All the persistent traces of cerebral activity—writings, works of art, social facts reported by witnesses and conserved in histories—have a documentary value of which the psychiatrist may make good use long after the death of the patients. Moreover, in view of the social functions of the brain, many of these troubles manifest themselves by more or less unusual actions, which, in all times

have astounded contemporaries, and when the psychopaths were great personnages, their acts and gestures have been recounted by historians. Often in these cases the lack of medical knowledge on the part of the narrators has been a fortunate circumstance for us. Knowing how to observe, and without any preconceived ideas, they have simply described, objectively and naively, and their description has the value of a first hand document, whereas, sometimes, the savant has seen reality only through the theory in vogue at his time, and his description was falsified by what he believed to be his science.

"Finally, a third reason makes it necessary for the neuropsychiatrist to know the history, not only of medicine, but of civilization in its entirety. Indeed, the old dogmatic division between soul and body has permitted a part of normal and abnormal psychology to be confounded with philosophy. I know very well that abnormal psychology is not all of psychiatry. Nevertheless its history is inseparable from that of psychology..." (9-10).

Three Frenchmen have made admirable contributions to the history of mental disease. Ulysse Trélat made a profound study of the authors of the 17th and 18th centuries. He was followed by Calmeil who gave a classic description of the mass epidemics of insanity which succeeded one another from the middle ages up to the 19th century. Morel, incidental to his other work, gave excellent reviews of ancient conceptions of mental disease.

Laignel-Lavastine and Vinchon treat of three centuries—the 16th, which saw a revival of the critical spirit, and the rediscovery of the works of the ancient masters; the 17th century, in which scientific method enters medicine, and the 18th century, which in the work of the encyclopedists, laid the intellectual foundation for the subsequent labors of Pinel, and served to transform asylums into hospitals, and the alienated into "medically sick."

As representatives of the 16th century, the authors discuss the work of Jean Schenck, whose seven volumes of medical history covered the ground from antiquity to the end of the 16th century; and that of Ambroise Paré, who though noted especially for his contributions to surgery, made incidental contributions to neuroanatomy. The 17th century is represented by detailed studies of the distinguished Thomas Willis, and of Paul Zacchias who founded the science of legal medicine. The discussion of the 18th century is confined to an analysis of the work of La Mettrie and the French materialists, especially as represented in the articles on mental disease in the Encyclopédie; and to a long description of animal magnetism as expounded by Lavater and Mesmer. In the final chapter we have a survey of the work of Pinel, with some attention to his contribution to the legal aspects of psychiatry.

This is a scholarly work, well worth the serious attention of all interested in the history and practice of psychiatry. The publishers, too, should be complimented for the artistic manner in which they have prepared the volume, which includes excellent reproductions of the engravings of the masters treated in the volume.

MALZBERG.

Children—Why Do We Have Them? By DORA RUSSELL. 287 pages. Harper and Brothers, New York and London.

Throughout the book the author pleads for liberalization of the attitude toward children and the freedom from restraint and restrictions placed upon them. She emphasizes particularly that in rearing and educating children, their emotional development should be given consideration. In pointing out the attitude of parents toward children through the nineteenth century, it would seem that there was no need for any admonition to be given to any parent to defend the issue of his or her body. On the surface it would seem that this is instinctive yet as the author points out we have child labor, neglect of children, drinking, and we influence suppression in children; attempts at liberalizing the social and economic standards so that children may grow and live in a happier world are met with opposition. The author points out how obvious it is that hate rules the world rather than parental love and that children are not first but the last thing society cares for. Attempts at disseminating knowledge with regard to birth control are met with resistance at every point. Before the State assumed obligation with regard to social conditions large families were raised on the pretext that the parents loved their children whereas the real reason was ambition and possessiveness; they had many children so as to have help on the farm. Large families were raised to be defenders of the country and the father; sons were needed to protect the tribe—to produce wealth and to prey upon weaker neighbors. This was due to an insecurity based on fear of failing food supply and a fear of violent death. Taboos resulted in the practice of parenticide, matricide and infanticide. The author points out that the Ten Commandments concern the neighbors' wives, oxen and slaves and a compassionate injunction for the preservation of the old but they do not contain a word concerning the rights of children. God, property and parents are the objects of chief concern. She states that this is a defense reaction on the part of the elders; that it is strange the earliest roots of pity should lie in the fears of old men. Sex and food were the compelling desires. There was very little evidence of any conscious desire for children or love and delight in them. Women expressed thir contribu-

tion to life in terms of contributions to the men who owned them. There was a struggle on the part of the individual to free himself from biological slavery. Refuge was more frequently sought by asceticism and in celibacy. Vows of chastity meant no marriage and no children. Through the advance of science more children have survived to be the victims of a still more merciless exploitation. But today the parental helplessness is being assisted by two forces: First, a close-knit security and prosperous State. Second, birth control. There is a collective responsibility for the non-productive units of society—the old, the sick, the very poor; the very young have become a matter of concern to the State in place of the patriarch. The period of infancy and preparation for life are being prolonged under State control and compulsory education. Parental love is weak when it comes to sacrificing parental profit and prestige. For example, opposition was made to compulsory education, to the raising of the school-leaving age, to factory legislation, to the liberation of slaves, and to the refusal of the English Parliament to reduce the working week of adolescents even to the level of adult men and women. Birth control has made it possible to separate desire for each other and reproduction. Old age pensions have removed somewhat the dependency on children and thus has made parenthood not so essential.

The entire point of view of society is shifting. The author then asks the question "How far can mothers follow the path of luxury and refinement away from the rougher aspects of life and how far can they—and by what process—disentangle themselves from the traditions of maternal and family behavior?" These women have been blaming external factors for their bondage but it is their own psychic slavery which is the cause. There has been an over-conscientious hygiene applied by the mother to herself and the child, a wish to preserve her figure, her career and to advance herself intellectually. She deplores the lack of facing honestly the female element in women and the ignorance of sex and maternity. The author pleads for emotional maturity in women by their love for other human beings as equals and approaching parenthood courageously and with forethought.

For proletarian mothers there is no escape into idleness or irresponsibility. They marry younger and are bound down by a social and economic system which has made it necessary to limit the number of children in the family. The author calls attention to abortion as an increasing cause of maternal death, and also to the non-survival of the child born out of wedlock. The increasing necessity for Caesarean birth she traces to the faulty diet in childhood which has resulted in rickets.

The present family system built upon father rights affects almost every detail of our lives. She considers these rights from the legal, economic,

eugenic and psychological points of view. The alimony rights of women she deplores and the system of penalizing married women who seek to aid the family budget or who, when deserted, must support the children.

The desire for power over as many women and children as possible is the male sex impulse; in women it is the desire for power over as many men and children as possible. Mothers satisfy this impulse by control over their daughters and daughters-in-law and by their insistence on filial duties in sons.

In discussing the attitude of the school toward the child the author pleads for a liberalization of the methods of imparting knowledge rather than clinging to the hard and fast regime of 20 minutes of this and 30 minutes of that; marching in and marching out. Their education should proceed by observation of real things—plants, flowers, animals, chemicals, food and other materials—their own bodies—colors. She laments the lack of transmitting the proper sex knowledge. The author's attitude toward children is well expressed in the following quotation from her book where she is discussing the child's morals: "Dear adult, he is potentially more virtuous than you, more industrious, less bored, less vindictive, clearer in his bodily impulses and curiosities, more ready than you to speak kindly when he feels so, just as he is more prompt to express his resentment. He is more ready than you for give and take and, when he really feels, more deeply compassionate. Give him the right to the core of his egoism, to pride in his body and his achievements. It is through these, and through contact and conflict with the same things in others that he learns to love, to tolerate, and to admire. Not by the dark road of self-doubt and humiliation."

For the anxious parent, for the person dealing with the suppresive type of parent and for the individual having difficulties with our social and economic system, this book will afford a great deal of relief, satisfaction and comfort. And while we may not agree entirely with all the views of the author, nevertheless when the last page is turned we are prompted to take an inventory of ourselves and of society in general.

HAROLD H. BERMAN.

Visages et Caracteres. Etudes de Physiognomonie. By LOUIS CORMAN in collaboration with Gervais Rousseau. Librairie Plon. Paris, 1932.

There are correspondences, the authors tell us, between mental activity and the form of the body. Becoming more specific, they say that it is not the entire body that they envisage in this relation, but only the face and

the hands, both of which are easily visible and furnish a replica of the total form of the body.

They do not postulate a causal relation between the two. "The psychic fact depends no more upon the fact of morphology, than does the latter upon the mental fact. In these matters, there is no authority for postulating causes, effects, dependence. There are interdependences, correlations, 'accompaniments.' Mental and morphological fact are both the expression of a third fact which englobes them both: living activity in its most profound reality." (2-3).

In the introduction to this volume it is stated that the authors have enabled us to deduce the character of an individual from a knowledge of his corresponding physical characters, and that the book furnishes a solid basis for the education of children, vocational guidance, etc.

If substantiated, these accomplishments would furnish a very valuable contribution to both theoretical and applied psychology. Unfortunately there is not a scintilla of evidence to support the statements. The book is vaguely descriptive throughout and nowhere provides a single set of observations from which any measure of degree of correlation between physiognomy and character could be calculated.

In the fourth part there is a scheme of classification which sets up eight types; five of these are called types with material tendencies, and three are types with spiritualized tendencies. Of the former, four are masculine types and one feminine. The masculine types include one showing an instinct to combat, one an instinct to nutrition, and another also with an instinct to nutrition, but showing, in addition, numerous intellectual dispositions. The fourth type presents a "repression" of tendencies (dysphoric humor). In the feminine type there is emphasis upon the sex instinct. Of the three types with spiritualized tendencies, two are masculine and one feminine. The two masculine types consist of one in which the play instinct is diversified into an intellectual curiosity, and another in which there is idealism in the tendencies. The feminine type shows tendencies toward the dream. The two latter types constitute the artists.

Readers interested in the scheme and its elaboration into alleged physical and psychological concomitants, will find a lengthy exposition from page 181 to 277. As stated above, however, the study is entirely lacking in objectivity and no proof of the reality of the correlations is offered. We can therefore do no more than read the schemes of classification with interest, and hope that some day the authors will provide us with the data essential for establishing the correlations, if indeed these do exist other than in the imagination.

MALZBERG.

REPORT OF A CASE OF PRIMARY LATERAL SCLEROSIS

(*Admitted to Marcy State Hospital October* 24, 1931)

The infrequency with which this neurological syndrome is reported in State hospital records has suggested the following case report. It is of interest to note that the predisposing cause appears to be exposure to cold and wet with an acute onset following an attack of influenza.

Family History: Thomas A. was born on Christmas Day, 1884, in the State of New York. His birth and early development were without note. He worked as a farmer all his life.

In 1926, the patient was engaged in a lengthy program of lodge visiting and during this period was exposed to rough weather and sustained many wettings. He finally developed an attack of influenza and was in bed for a period of two weeks. During convalescence he began to notice an increasing difficulty in walking and experienced a very definite weakness of the lower limbs together with an inability to control them. He described this feeling in his own words as "being incased in concrete." The condition became progressively worse and upon the advice of his physician he presented himself at the Fulton mental clinic. There he was advised to enter the hospital.

Mental examination: Beyond a slight reactive depression to his infirmity, there was little evidence of any psychotic features.

Physical examination: The physical examination showed a well-developed male of the athletic type. Blood pressure 125/80. Hemoglobin 90 per cent. Ophthalmic examination demonstrated a partial cataract in the right eye, probably from an old trauma. Fundi were normal. Urinalysis showed an occasional hyalin cast with 1 plus albumen, specific gravity 1.028. Blood and spinal fluid gave negative Wassermann reactions in both antigens. Blood chemistry was within normal limits. The red blood count 5,360,000; white count 7,000. The character of the red cells was normal. X-ray of the left and right knee joints and the right hip showed no evidence of bony change.

Neurological examination: The gait was distinctly scissors types. The patient had a rolling motion as he walked and threw his body from side to side to assist the movements of his legs. The knees were very slightly bent and the limbs were thrown out and pushed forward with apparent effort. The feet were inverted and the inner surfaces and toes scraped the floor as they were brought forward. The gait was markedly spastic and

after walking up and down the hall two or three times, the patient was very definitely fatigued.

Cranial nerves: Smell and taste were normal. There was a slight injection of the right conjunctiva and an external strabismus of the right eye with what appeared to be a thickening of the right cornea and a partial areus senilis. The right pupil was irregular and elongated. The left pupil was smaller than the right, spherical in shape but also irregular. The reaction to light in the right pupil was sluggish and the arc of reaction was limited. The left pupil reacted more promptly. The reaction to accommodation can be similarly described. The field of vision in both eyes was not limited. Examination of other cranial nerves was negative.

Motor functions: Upper limbs: The motor functions of the upper limbs and trunk were normal.

Lower limbs: The patient was able to walk in a straight line with difficulty but was able to follow it. The heel to knee test was performed in both extremities with difficulty, particularly marked in the left. In the Romberg posture the patient showed a slight initial swaying and tremor of the eyelids but did not fall. There was a marked coarse tremor of both thighs which became more apparent following fatigue. The extensor muscles of the knees were particularly involved and over this area there were many fine isolated fibrillary movements of smaller muscle bundles. No choreiform movements were noted.

Sensory functions: Examination was negative.

Reflexes: The plantar reflex in the right foot elicited a definite extensor response. In the left there was a slight early suggestion of extension of the great toe with flexion of the remaining toes. Abdominal reflexes were present and active on both sides. Knee jerks were very markedly exaggerated and could be elicited with a tap of a pencil. Following fatigue, stimulus elicited a clonic type of response. The ankle jerks and other deep reflexes were also exaggerated. Ankle clonus was bi-laterally elicited and was well sustained. Patellar clonus could be similarly described.

Atrophy: There was no evidence of trophic disturbance found. There was no atrophy apparent either in the upper limbs, trunk or lower limbs.

Neurological Summary

1) Spastic gait with a tendency to abductor spasm and hypertonicity of affected muscle group.

2) Marked increase of deep reflexes, especially of the lower extremities with patellar and ankle clonus.

3) Plantar reflexes exhibit a Babinski response, more marked on the right side than on the left.

4) No sphincter disturbance.

5) Negative serological and systemic studies.

6) Absence of atrophy.

7) No sensory defect of any kind.

8) No defect directly attributable to cerebellar or cerebral disturbances.

The features enumerated would fit directly into McKendree's syndrome of primary lateral sclerosis. Although a differential diagnosis would not definitely rule out disseminated sclerosis it was felt that the case was correctly classified as primary lateral sclerosis.

O. A. Kilpatrick, M. D.,
Marcy State Hospital.

THE TWENTY-FIFTH ANNIVERSARY OF THE BIRTH OF THE MENTAL HYGIENE MOVEMENT

On May 6, 1908, a group of 14 men and women met in New Haven, Connecticut, and founded the Connecticut Society for Mental Hygiene, the first organization of its kind in the world. The guiding genius of the movement was Clifford W. Beers, whose book "A Mind That Found Itself," had exercised a profound influence upon Professor William James, Dr. Adolf Meyer, Dr. W. H. Faunce, Dr. Charles W. Eliot, Cardinal Gibbons, Dr. William H. Welch, and many others. Mr. Beers had originally suggested to this group the advisability of organizing a National Committee for Mental Hygiene, but he was advised to proceed cautiously by first working out a state-wide program. It was Mr. Beers' hope that a society for mental hygiene would aid in education and reform in the field of nervous and mental diseases, improving the conditions of those actually insane and confined, and protecting the mental health of the public at large; that it would cooperate with hospital officials on the one hand, and with the general public on the other, through a campaign of enlightenment as to the true nature and treatment of mental disease.

A quarter of a century later, on May 6, 1933, the founding of the mental hygiene movement was appropriately celebrated in New Haven, under the auspices of the National Committee for Mental Hygiene, the Connecticut Society for Mental Hygiene, and Yale University. Morning and afternoon sessions were held. The morning session was devoted to a discussion of mental hygiene in education, the speakers being Dr. William J. Cooper, United States Commissioner of Education; Dr. V. T. Thayer, educational director of the Ethical Culture Schools, New York City; and Dr. Marion E. Kenworthy, of the New York School of Social Work. The afternoon session was presided over by President James Rowland Angell, of Yale, who spoke on Mental Hygiene in Colleges and Universities. Governor Wilbur L. Cross of Connecticut, formerly dean of the Graduate School at Yale, reminisced on Mr. Beers as a student, and described his own reactions to Mr. Beers' book. Professor C. E. A. Winslow of Yale, president of the Connecticut Society for Mental Hygiene, spoke on the significance and growth of the mental hygiene movement and introduced Mr. Beers, who spoke on "Glimpses of the Development of the Movement."

In the 25 years since the organization of the Connecticut Society for Mental Hygiene, similar groups have been organized in 24 other states, and the District of Columbia. National societies have been organized in 29 countries including the United States. An International Committee for Mental

Hygiene was founded in 1930 and held the first International Congress on Mental Hygiene in Washington in May, 1930. A second International Congress is to be held in Paris in 1935.

The rapid growth of national, state and local committees in the United States and the need for their financial support lead to the organization of the American Foundation for Mental Hygiene, which has laid plans for raising a permanent endowment fund of from $1,000,000 to $5,000,000, the income from which will be used for the support of mental hygiene activities.

In its 25 years of activity, the mental hygiene movement has served to raise the standard of care for the mentally ill throughout the country, and has aided in securing increased hospital facilities. With the financial assistance of the Commonwealth Fund, over 700 child guidance clinics have been established throughout the United States. The National Committee for Mental Hygiene was responsible for the demonstration clinic at Sing Sing Prison, the first of its kind in the country. Other important activities of the mental hygiene movement include the standardization of statistics relative to mentally ill, a study of the relation between psychiatry and the law; the training of psychiatric mental hygiene personnel, and improvement in the quality of instruction in psychiatry in medical schools.

THE AMERICAN PSYCHIATRIC ASSOCIATION AT BOSTON

The American Psychiatric Association held its 89th annual meeting at the Hotel Statler, Boston, May 29 to June 2, 1933.

The section on convulsive disorders carried out its program on Monday, May 29, having a morning and afternoon session.

The regular sessions of the association were opened on Tuesday, May 30, with welcoming addresses by Hon. James M. Curley, mayor of Boston, Dr. Halbert G. Stetson, president of the Massachusetts Medical Society, Dr. Morgan B. Hodskins, president of the Massachusetts Psychiatric Society and by Herbert C. Parsons, president of the Massachusetts Mental Hygiene Society.

Dr. James V. May in his presidential address indicated the need for maintaining high standards in education and in the practice of psychiatry and advocated the formation of a special board for certification of psychiatrists.

During the scientific session of the association, a large number of papers were presented, including studies in pathology, adequate psychotherapy in public mental hospitals, interpretation of symptomatology, studies in clinical pathology, and educational topics.

On Wednesday morning, May 31, the association held a joint session with the American Psychoanalytic Society and on Wednesday afternoon a joint session with the American Association for the Study of the Feebleminded.

On Wednesday evening, May 31, instead of the traditional annual address and president's reception, an annual dinner for members and guests of the association was held at the New Ocean House, Swampscott. At this dinner an address was given by Hon. Joseph B. Ely, governor of Massachusetts. A musical program and dancing followed the dinner.

An important event of the meeting was the adoption of a revised constitution. This new constitution especially sets up requirements for various classes of membership in the association. It provides also for the appointment by the president of an examining board of not less than five Fellows who shall make a report and recommendation to the council of the association on every application for every class of membership and shall perform such other duties as the council may assign. The following Fellows of the association were appointed as such a board of examiners:

Dr. Clarence O. Cheney, New York, Chairman
Dr. Adolf Meyer, Baltimore
Dr. William A. White, Washington
Dr. C. Macfie Campbell, Boston
Dr. Franklin G. Ebaugh, Denver

Upon this appointment the board was immediately directed by the council to prepare and submit to the executive committee of the council a plan for the certification of psychiatrists. Dr. Cheney and Dr. Campbell were appointed as delegates of the board to attend the conference of the other special boards and of the American Medical Association to be held in Milwaukee on June 10.

The following officers were elected for the coming year:

President, Dr. George H. Kirby, New York.

President-elect, Dr. C. F. Williams, South Carolina.

Secretary-Treasurer, Dr. William C. Sandy, Pennsylvania.

For Councillors: Dr. James V. May, Massachusetts; Dr. C. C. Burlingame, Connecticut; Dr. Edward A. Strecker, Pennsylvania; Dr. Arthur P. Noyes, Rhode Island, for a period of three years.

Dr. G. Kirby Collier of New York was elected as councillor to fill the unexpired term of Dr. Williams and Dr. Marcus A. Curry of New Jersey was elected as councillor to fill the unexpired term of Dr. Sandy. Dr. Mortimer W. Raynor was elected auditor for three years.

On petition the association approved of the establishment of a section on psychoanalysis and Dr. A. A. Brill was elected chairman and Dr. Leo Bartemeir of Detroit was elected secretary of this section. Also, on petition the association approved of the establishment of a section on forensic psychiatry and conduct disorders. Dr. William A. White of Washington was elected chairman and Dr. V. C. Branham of New York was elected secretary of this section. Dr. Thomas B. Bass of Texas and Dr. John H. Bell of Virginia were elected chairman and secretary, respectively, of the section on convulsive disorders.

The association voted to hold the next annual meeting in New York, the time to be later decided upon by the executive committee.

During the sessions 442 members and 528 guests registered. The Boston meeting was generally conceded to be a most successful one.

ANNUAL MEETING OF THE AMERICAN ASSOCIATION FOR THE STUDY OF THE FEEBLEMINDED

The American Association for the Study of the Feebleminded held its fifty-seventh annual meeting at the Hotel Statler in Boston, May 31 to June 3, 1933. The meeting was held in conjunction with the meeting of the American Psychiatric Association, and the program included one joint session of the two associations. All program sessions were well attended.

Two distinct trends were observed in the papers presented at the meeting. One trend was concerned with treatment of the personality and emotional factors in the individual mental defective, and the other with neuropathological and neuro-anatomical studies of the various types of mental deficiency.

Round table discussions were provided on four different topics, namely: Research, colony and parole care, private schools for mental defectives and education. The round table conferences were well attended.

The association had its usual annual dinner following which the president, Dr. Howard W. Potter, gave the annual address. Dr. Potter stressed the imporance of training physicians for the field of mental deficiency and stated that this was a responsibility that should be seriously assumed by the State institutions for mental defectives.

On recommendation of the council the members of the association voted to change the name of the organization from "The American Association for the Study of the Feebleminded" to "The American Association on Mental Deficiency." It was also voted that the proceedings and addresses of the annual meeting be published under the title of "Journal on Mental Deficiency."

The association also accepted the report of its Committee on Statistics. Dr. Horatio M. Pollock, chairman of the Committee on Statistics, submitted in the report a revision of the statistical manual for the use of institutions for mental defectives, the major change being in the introduction of a clinical classification of mental defectives.

The association elected to hold its next annual meeting in New York City. The officers elected for the ensuing year are: President, Dr. Ransom A. Greene, superintendent of the Walter E. Fernald State School, Waverly, Mass.; vice-president, Dr. Mary M. Wolfe, superintendent, Laurelton State Village, Laurelton, Pa.; secretary-treasurer, Dr. Groves B. Smith, superintendent, Beverly Farms, Godfrey, Ill; councillors, Dr. Benjamin W. Baker and Professor E. R. Johnstone.

The next annual meeting of the association will be held in New York City.

DEATH OF DR. ISAAC J. FURMAN

Dr. Isaac J. Furman, superintendent of Manhattan State Hospital, died at his home at the hospital, May 5, 1933, at the age of 54 years.

Dr. Furman was born at Fairport, N. Y., March 21, 1879. He graduated from Macedon Academy in 1899. After teaching in the public schools for three years he entered Colgate University to take a pre-medical course. He matriculated in the Medical School of Syracuse University in 1902 and graduated therefrom with the degree of Doctor of Medicine in 1906. He was engaged in general medical practice at Wanekena and Shortsville, N. Y., from 1906 to 1912. On July 15, of the latter year he entered the State hospital service as medical interne in Kings Park State Hospital. He was promoted to assistant physician March 21, 1913, and to senior assistant physician, July 1, 1916. He was appointed first assistant physician at the Buffalo State Hospital, February 15, 1924, and was transferred to the same position in the Manhattan State Hospital on June 10, 1924. He was appointed by Commissioner Parsons superintendent of Buffalo State Hospital, April 1, 1928. After serving with distinction in this position for two years he was transferred to the superintendency of Manhattan State Hospital, May 1, 1930.

While serving as senior assistant physician at Manhattan State Hospital in 1923, Dr. Furman was appointed professor of psychopathology at Teachers' College, Columbia University and in 1924 he was appointed associate professor of clinical psychiatry at the College of Physicians and Surgeons of the same university. He held both of these positions until he became superintendent at Buffalo.

Dr. Furman was a member of the American Medical Association, the American Psychiatric Association, the New York Society of Clinical Psychiatry and Ward's Island Psychiatric Society. He was also a member of the Masonic Fraternity, the Alpha Omega Delta Fraternity and the Methodist Church.

On December 1, 1906, Dr. Furman was married to Miss Celia Thayer of Fairport, N. Y., who now survives him.

Funeral services were held at the superintendent's residence on Ward's Island on May 8, and also at the home of his brother, Mr. Mark Furman, at 609 South Main Street, East Rochester, N. Y., the following day. Both services were attended by a large number of physicians and others who had been associated with Dr. Furman during his long period of hospital service.

The following fitting tribute from the pen of Dr. Frederick W. Parsons, Commissioner of Mental Hygiene, expresses the sentiments of esteem and

DR. ISAAC J. FURMAN

affection for Dr. Furman which were shared by officers and employees of the State hospital system:

"Dr. Furman's death is a great loss to the Department of Mental Hygiene. Until his illness supervened he most effectively met, in a quiet, unperturbed manner, the many administrative questions arising in a metropolitan hospital which because of its large admission rate and its accessibility to New York City easily could have become turbulent. When he was urged to surrender an up-State position and take over large responsibilities he accepted the departmental decision, although he would have preferred not to have changed.

"In his dealings with the Department and his fellow superintendents, Dr. Furman was cooperative and considerate, and to the employees and the patients he was always ready to listen patiently, to deal with justly and to advise constructively. He did his job well and at its doing died."

DEATH OF DR. MITCHELL

Dr. Harry W. Mitchell, well-known psychiatrist, hospital superintendent and former president of the American Psychiatric Association, died at his home at Warren, Pa., June 13, 1933.

Dr. Mitchell was born in Plymouth, New Hampshire, November 6, 1867. He obtained his medical degree from the University of Vermont in 1896 and the same year began his life work in the care of mental patients in institutions. He occupied successively the following positions: Assistant physician at the State Farm, Bridgewater, Mass., 1896-99; assistant physician, Danvers (Mass.) State Hospital, 1899-1907; superintendent, Eastern Maine Insane Hospital, 1907-10; superintendent, Danvers State Hospital, 1910-12; superintendent, State Hospital, Warren, Pa., 1912-33.

Dr. Mitchell was an active member of the American Psychiatric Association from 1899 to the time of his death. He served the association as vice-president in 1922 and as president in 1923. Other scientific societies of which Dr. Mitchell was a member included the American Neurological Association, the Association for Research in Nervous and Mental Diseases, the American Institute of Criminal Law and Criminology, the Philadelphia Psychiatric Society and the Philadelphia Neurological Society.

By virtue of his administrative ability and his progressive spirit, Dr. Mitchell was privileged to render noteworthy service on behalf of the mentally diseased in three states, and to assist in the advancement of psychiatry throughout the country.

HENRY A. COTTON

Dr. Henry A. Cotton, internationally known psychiatrist, died of heart disease at Trenton, New Jersey, May 8, 1933.

Dr. Cotton was a native of Virginia, having been born at Norfolk, May 19, 1869. He was graduated from the Baltimore Polytechnic Institute in 1894 and was a special student in Johns Hopkins University in 1895. His medical training was received in the University of Maryland and the University of Munich.

In 1903, Dr. Cotton became a member of the staff of the Worcester (Massachusetts) State Hospital. After service of three years he accepted a position in the Danvers State Hospital, where he worked for four years. He then became medical director of the New Jersey State Hospital at Trenton. He retained this post for about 24 years. His enthusiasm and zealous work early attracted wide attention. His writings and addresses on the relation of focal infections to mental disease and on his experimental work at Trenton were published in newspapers and magazines throughout this country and Europe. Although other investigators were not able fully to confirm Dr. Cotton's findings, there can be no doubt that his emphasis on the necessity of clearing up focal infections was instrumental in improving the physical treatment of mental patients.

Dr. Cotton was a veteran of both the Spanish-American War and the World War. In the latter he was commissioned a major in the Medical Corps.

DR. OWEN COPP DIES IN SPAIN

Dr. Owen Copp, distinguished hospital administrator and former president of the American Psychiatric Association, died suddenly from a heart attack on April 18, 1933. At the time of his death he was attending a fair at Seville, Spain.

Dr. Copp was born in Salem, N. H., January 12, 1858. He graduated from Dartmouth College in 1881 and received his medical degree from Harvard in 1884. He became assistant physician at Taunton, (Mass.) State Hospital in 1885. After serving ten years in such institution he was promoted to the position of superintendent of the Massachusetts Hospital for Epileptics at Monson. Four years later he became executive secretary of the Massachusetts Board of Insanity. His work in this position attracted national attention and in 1911 he was called to the position of physician in chief and administrator of the mental hospital department of the Pennsylvania Hospital in Philadelphia. In 1922 he retired from the active management of the institution and became consultant for hospital development.

For many years Dr. Copp was a leader in the American Psychiatric Association and was president of the organization in 1921. His achievements in improving the care of the insane in Massachusetts and in developing the Pennsylvania Hospital gave him high rank among the leading hospital administrators of this country.

SANDOR FERENCZI

In the death of Dr. Sandor Ferenczi in Budapest, May 22, 1933, psychiatry and psychoanalysts lost a distinguished representative. Dr. Ferenczi, son of a publisher, was born in the city of Miskolcz, Hungary in 1873. He obtained his university training in Budapest, but took his medical course in the University of Vienna. After a somewhat brief occupation with surgery and gynecology he took up neurology and psychiatry and at an early age became psychiatric adviser to the Court of Justice in Budapest. His activity in these first years is documented by some 25 publications. In the natural course of events he read Freud's *Traumdeutung* and was unfavorably impressed. It is characteristic of him that he nevertheless continued his investigations of it and eventually subjected himself to analysis by Freud. From about 1906 he devoted himself more and more and finally almost exclusively to psychoanalysis. In 1909, at the invitation of G. Stanley Hall, he came to Clark University with Freud and Jung and took part in the symposium there. In 1926-1927, he spent a year in New York City.

Though a somewhat prolific writer, having to his credit upwards of 150 items in his bibliography on psychoanalysis, Dr. Ferenczi was uniquely constructive. Some of his studies are concededly, next after Freud's, of fundamental importance to psychoanalysis. On account of his skill, and wise kindness he was greatly respected as a physician. Perhaps, no one, except Freud, among his psychoanalytic colleagues was more beloved. In 1918 he was honored by election as president of the International Psychoanalytic Association.

Dr. Ferenczi was not of a robust physique. His unremitting application, not little of which was freely bestowed, undoubtedly contributed in considerable measure to wear down his defense against a primary anemia. To his students and friends his death is well nigh an intolerable loss.

G. S. AMSDEN.

NOTES

—Dr. G. C. Brennan has been appointed psychiatrist in Grasslands Hospital, Westchester County, to succeed Dr. T. J. Vosburgh, who recently died.

—Dr. Charles S. Little, superintendent of Letchworth Village, was awarded the honorary degree of Doctor of Science by Dartmouth College on June 19, 1933.

—Dr. James L. McCartney, director of the Classification Clinic at Elmira Reformatory, was awarded a grant of $1,000 by the Thomas W. Salmon Memorial Committee of the New York Academy of Medicine, for an investigation of the classification of prisoners, and the preparation of a handbook on classification for use in prisons.

—The Committee on Institutions of the Illinois Society for Mental Hygiene has prepared a series of recommendations concerning the medical organization of the Illinois State Hospitals for the Insane, which were submitted to Governor Henry Horner on May 22, 1933.

The report lays stress on the building up of morale in the staff of the state hospitals by making both appointment and promotion dependent strictly upon individual merit, as tested by adequate civil service regulations.

Greater cooperation with universities is recommended, as this will encourage recent graduates of medical schools to seek interneships in the state hospitals; it will give hospital physicians opportunities for special training, and will encourage research.

Closer cooperation between each hospital and the medical profession may be achieved by expanding the out-patient clinic service, and by holding medical meetings at the hospitals.

The hospitals should endeavor to meet the standards of the American Medical Association, with respect to a minimum ratio of physicians to patients, sufficient laboratory equipment, and a certain percentage of autopsies.

The report recommends the employment of a sufficient number of psychiatric social workers to permit the preparation of adequate social histories of patients for use in the wards, and to make possible an increase in the use of parole with supervision through out-patient clinics.

The nursing staff should be appointed through the merit system, the civil

service requirements to be changed so as to include specialized psychiatric training. The training of nurses in the state hospitals should be conducted on the basis of post-graduate and affiliate schools.

Activities coming under occupational therapy, including recreation, should be expanded so as to apply to all patients. Appointments as occupational therapist should be through civil service, and examinations should be held frequently.

The committee recommends that the division of state alienist in the Department of Public Welfare be broadened so as to serve as a division on mental diseases.